Review of the Regulated Waste Classification and Waste-Related Environmentally Relevant Activity (ERA) frameworks

Consultation Regulatory Impact Statement

June 2017

Contents

Glossary 4
The Queensland regulatory impact system 5
Executive summary 5
Have your say. 6
1.0 Issues statement 7
2.0 Policy objectives 8
3.0 The legislative framework for managing waste in Queensland 8
3.1 Regulated waste classification 8
3.2 Environmentally Relevant Activities (ERA) 8
3.3 Issues / criticisms of the current waste management frameworks 9
4.0 Policy options 10
4.1 Option 1: Maintain the status quo 10
4.2 Option 2: Adopt a new integrated risk-based regulatory framework 10
4.2.1 Proposed regulated waste classification system 10
4.2.2 Proposed waste related ERAs 11
5.0 Regulatory impact assessment 11
5.1 Option 1: maintain the status quo 11
5.2.1 Existing ERA approval holders (industry) 12
5.2.2 State government 15
5.2.3 New activities 16
5.2.4 Local government 16
5.2.5 Waste sampling and testing costs 17
5.2.6 Implementation and transitional impacts 18
5.3 Cost benefit summary 18
5.4 Preferred policy option 18
6.0 Consultation process 19
6.1 Regulated waste classification framework 19
6.2 Waste-related ERA framework 19
7.0 Consistency with other policies and regulation 19
7.1 Competition principles agreement 19
7.2 Fundamental legislative principles 19
8.0 Implementation, evaluation and compliance support strategy 20
Attachment A: Proposed ERA framework 21
ERA 53 Organic material processing 21
ERA 55 Waste processing or treatment 22
ERA 57 Waste transport 23

ERA 60 Waste disposal 25
ERA 62 Waste transfer and resource recovery facility 26
Attachment B: Preferred ERA framework threshold, AES and annual fee summary 28
Attachment C: Regulated waste transport annual fee changes 29
Attachment D: New ERA threshold and category determination 30
Attachment E: State government impacts – number of activities and annual fee estimate 35
Attachment F: Default waste categorisation table 37
Attachment G: Hazard parameter waste categorisation table 40

Glossary

AES	Aggregate environmental score
AWT	Alternative Waste Technology
RIS	Regulatory Impact Statement
ERA	Environmentally Relevant Activity
AWT	Alternative Waste Treatment
EfW	Energy from Waste
EHP	Department of Environment and Heritage Protection
EPU	Equivalent Passenger Units
PCB	Polychlorinated Biphenyls
ULAB	Used Lead Acid Batteries
WRR Act	Waste Reduction and Recycling Act 2011

The Queensland regulatory impact system

The Queensland Government is committed to applying regulatory best practice principles to reduce the regulatory burden on the community and to ensure that where regulation is used it is efficient, effective, and in the public interest. The regulatory impact statement system guidelines are issued by the Treasurer and require all Queensland Government agencies to carefully assess the impacts of proposed laws and rules on business, the community and the government.

Consultation is an important way of improving the quality of regulation at all stages of the regulatory development process. Where a regulatory proposal may provide a net benefit to the community but is likely to have significant adverse impacts on a section or sections of the community, a consultation Regulatory Impact Statement (consultation RIS) is required. The consultation RIS provides the community an opportunity to consider the options of the proposed regulation and its impacts. Stakeholder responses to the consultation RIS will give decision makers valuable information on which to base their policy decisions and to avoid unintended consequences and unnecessary compliance burdens. Further information on the RIS system may be found on the Queensland Productivity Commission's website: www.qpc.qld.gov.au

Executive summary

Some wastes such as 'regulated waste' and 'hazardous waste' pose a significant risk to the environment and to human health, and as such must be managed throughout their life-cycle. To manage these risks effectively a higher level of regulation is required, which means managing how these wastes are transported, stored, treated and disposed of.

To improve the way Queensland manages these risks the Department of Environment and Heritage Protection (EHP) is undertaking a review of two key elements of its management framework being:

- Waste related environmentally relevant activities (ERA); and
- Regulated waste classification.

Because both reviews are part of a larger waste framework it has been decided to develop a single RIS to consider the combined impacts.

The two policy options presented within this RIS include:

- Option 1 – maintain the status quo; or
- Option 2 – (Preferred) adopt a new rationalised framework with a list of contemporary ERAs and a risk based regulated waste classification system.

Maintaining the current number of waste related ERAs (Option1) will have the lowest impact upon existing stakeholders and will not change compliance and licencing workloads, however it will not provide the benefits of a risk-based framework.

The ERA framework has remained largely unchanged since its introduction in 1995. Since this time there have been significant changes in commercial and industrial waste management practices, coupled with the emergence of new waste management technologies and changes in waste policy and related legislation. In many cases the existing framework does not adequately provide for these changes. The preferred policy option presented in this paper has been developed to:

- clarify regulatory requirements for all waste management activities;
- classify risk levels associated with waste activities and waste types;
- provide greater support for new and emerging technologies; and
- ensure consistent application of the regulatory requirements across the relevant activities.

Improving the coordination between classifications of regulated waste and the waste related ERAs allows the overall associated risk to be better quantified. This will make it easier to apportion regulation that corresponds to the level of risk posed by the activity being undertaken and the nature of the waste. This is not possible under the current frameworks where all wastes are considered 'equal' (either regulated or not regulated) and there is no method for apportioning risk between different types of regulated wastes. The change is expected to generate improved environmental outcomes as EHP will be able to implement regulatory and management requirements that are proportionate to the risk. The preferred option will also increase stakeholder awareness of the environmental risks and management requirements for each of the ERAs and regulated waste categories.

A primary consideration of the RIS is the impact of the proposed annual fee structure and how the changes may impact industry, government and the community. A comparison of the fees under the current framework (option 1) and preferred framework (option 2) shows that there will be a marginal change in the overall revenue generated from waste-related ERA annual fees.

For some activities the proposed changes will result in a reduction in the annual fee, particularly for waste management activities that have been determined to be of a lower risk. The opposite is also true for some activities that involve high risk processes and waste types and these may have an increase in annual fee.

In carrying out its review EHP has identified that the administration of a number of waste related activities will transfer from the local government to the State, in particular EHP. This will result in additional administrative burden to the State and this has been considered by EHP in its review.

There are likely to be delays in implementing the new framework as the changes represent significant cultural change for the management of regulated wastes. Also, an increase in fees and the regulation of some activities may be seen as an unnecessary increase in 'Green Tape'. However, adoption of the new framework will provide a proportionate and contemporary regulatory framework for waste activities and increased confidence in the Queensland Government's ability to maintain environmental law and management practices.

Have your say.

Submissions are open until 25 August 2017. Submissions must be made in writing and can be emailed or posted.

Email: waste.paper@ehp.qld.gov.au

Post: Waste framework regulatory reform - consultation RIS
Environmental Policy and Planning
Department of Environment and Heritage Protection
PO Box 2454
Brisbane QLD 4001

Your responses may be subject to a right to information request, unless you indicate you would prefer your feedback to remain confidential.

1.0 Issues statement

One of EHP's core functions is to ensure that commercial and industrial activities, including waste management activities, are regulated to manage their environmental impacts. Regulating waste management activities is particularly complex due to the diverse nature of the wastes generated, the processes associated with the waste related activity and the large range of hazard parameters associated with these wastes.

In Queensland the *Environmental Protection Act 1994* (EP Act) and its subordinate legislation, the *Environmental Protection Regulation 2008* (EP Reg) provide frameworks for classifying waste and regulating associated waste management activities.

High risk wastes are called regulated wastes and are listed in schedule 7, part 1 of the EP Reg. Currently there are 71 regulated wastes listed in this schedule. Regulated wastes are considered to be higher risk as they contain contaminants or properties that have an increased risk to the environment or human health. Because of this increased level of risk regulated wastes are subject to an increased level of regulation.

Wastes which are not classified as regulated waste are considered general waste as they pose a lower risk and typically comprise waste arising from municipal solid waste (MSW), construction and demolition (C&D) or commercial and industrial (C&I) waste streams[1].

In addition, waste management activities generate emissions and have the potential to cause environmental harm. These activities are regulated as environmentally relevant activities (ERAs) and currently there are 12 waste-related ERAs listed in schedule 2 of the EP Reg, which are the subject of this review. In almost all instances, a facility that receives waste for processing, treatment, recycling or disposal must hold an approval for a relevant waste-related ERA. A list of these ERAs is provided in section 3.2.

Both the regulated waste classification system and the waste related ERAs have been in place for more than 10 years. During this time there have been significant changes in waste management practices and the development of new waste management technologies. These include:

- greater knowledge and understanding about wastes and their impacts on human health and the environment;
- a global move toward risk-based regulation of hazardous wastes;
- the large scale commercialisation of hazardous waste management with a high level of sophistication; and
- the development and refinement of new alternative waste treatment (AWT) processes and associated energy from waste (EfW) technologies, such as anaerobic digestion, pyrolysis, and gasification.

As a result of these advances the regulated waste classification system and waste ERAs need to be reviewed and relevant changes made. Specifically it has been identified that the current frameworks:

- do not provide a flexible risk based classification framework for wastes;
- do not always provide regulation proportionate to the level of environmental risk;
- are unclear about the regulatory requirements for some wastes and management activities; and
- present a real/perceived lack of support for new and emerging technologies.

- [1]Municipal solid waste (MSW) generated by households and usually collected through council kerbside waste collection services
- Construction and demolition waste (C&D) includes inert waste materials such as concrete, steel, pavers or timber arising from construction or demolition activities
- Commercial and Industrial Waste (C&I) is waste that may be generated from a range of activities such as accommodation, retail, administration services, other business activities or manufacturing or industrial processes

2.0 Policy objectives

EHP and industry have recognised that the regulation and administration of waste related ERAs, particularly those involving regulated wastes, do not align with current waste management practices. In addition, the system has limited flexibility to cater for emerging waste technologies and innovation, which has resulted in prolonged assessment timeframes, unsatisfactory regulation and inconsistent application of annual fees.

A number of policy objectives were developed to address the shortcomings in the existing system, including:

1. improved classification of waste based on the level of risk posed to the environment or human health;
2. management of waste ERAs that corresponds to the risk;
3. development of waste ERAs that support new and emerging technologies;
4. consistency for operators undertaking waste ERAs;
5. a regulatory environment that encourages innovation in waste management practices; and
6. a framework that does not impact on the viability of established industries and encourages capital investment, economic development and employment.

The outcome of the review process is to produce a waste-related ERA management framework and regulated waste classification framework that enables improved risk based regulation. This should also facilitate advancements in technology and improve opportunities for waste recovery and industry growth. The outcomes will also support government's agenda of reducing costs and the regulatory burden currently felt by industry while maintaining a sustainable and strong environment.

3.0 The legislative framework for managing waste in Queensland

In Queensland the *Environmental Protection Act 1994* (EP Act) and its subordinate legislation, the *Environmental Protection Regulation 2008* (EP Reg) define what is and what is not a regulated waste as well as what waste management activities must be regulated to, in order to protect the environment and human health. These are commonly referred to as the regulated waste classification and waste-related ERA frameworks. Combined, these frameworks are intended to ensure that the risks posed by certain waste types and their management activities are identified and appropriately managed.

For waste management activities that are classified as low risk (that is to say they do not require a prescribed ERA), the operator will still need to comply with the General Environmental Duty (GED) under the EP Act (s 319) as well as any other relevant local, state or federal government legislative requirements.

3.1 Regulated waste classification

Section 65 of the EP Reg provides a definition for regulated waste, which states:

(1) ***Regulated waste*** is waste that:
  (a) is commercial or industrial waste, whether or not it has been immobilised or treated; and
  (b) is of a type, or contains a constituent of a type, mentioned in schedule 7, part 1.

(2) Waste prescribed under subsection (1) includes:
  (a) for an element—any chemical compound containing the element; and
  (b) anything that contains residues of the waste.

(3) However, waste is not regulated waste if it is mentioned in schedule 7, part 2.

Schedule 7 of the EP Reg provides a list of items that are considered regulated waste (Part 1), and not-regulated waste (Part 2). Part 1 currently contains 71 items. These items include elements, compounds and physical properties. They also include specific waste types produced from certain processes, such as food processing waste. In accordance with the above definition a commercial and industrial waste containing any of these items, in any quantity or concentration, is considered to be a regulated waste.

Some wastes that would otherwise be classified as a regulated waste are excluded in Part 2. This list has been developed for regulated wastes that are considered to be a lower risk, and to support programs such as stewardship schemes where re-use, recycling or specific disposal options are preferred for these wastes.

3.2 Environmentally Relevant Activities (ERA)

Section 19 of the EP Act states that an activity may be prescribed as an ERA if the Governor in Council is satisfied:

- a contaminant will or may be released into the environment when the activity is carried out; and
- the release of the contaminant will or may cause environmental harm.

ERAs are prescribed within Schedule 2 of the EP Reg. There are currently 12 ERAs that relate to the management of waste, these are:

ERA 20 - Metal recovery
ERA 33 - Crushing, milling, grinding or screening
ERA 52 - Battery recycling

ERA 53 - Composting and soil conditioner manufacturing
ERA 55 - Regulated waste recycling or reprocessing
ERA 56 - Regulated waste storage
ERA 57 - Regulated waste transport
ERA 58 - Regulated waste treatment
ERA 59 - Tyre recycling
ERA 60 - Waste disposal
ERA 61 - Waste incineration and thermal treatment
ERA 62 - Waste transfer station operation

Facilities that receive waste and undertake one of the above activities must obtain a relevant waste-related ERA approval. However in some cases an ERA approval may not be required where:

- The activity being undertaken is not of a sufficient scale to trigger the requirement for an ERA. For example:
  - ERA 53 (composting and soil conditioner manufacturing) only requires an approval when the activity produces greater than 200t per annum; or
  - ERA 62 (waste transfer station) only requires an approval for facilities accepting greater than 30t or 30m^3 of waste in a day.
- The activity does not meet other requirements or definitions specified within the ERA. For example:
  - ERA 58 (regulated waste treatment) requires approval for facilities that "receive and treat regulated waste". A facility that processes its own waste, on the site where it is produced would not be captured by this ERA as the site does not 'receive waste'.

In each instance the requirement to obtain an ERA approval must be determined on a case by case basis by the operator undertaking the activity and the relevant administering authority. The administration of ERAs is generally undertaken by EHP, although some activities are currently devolved to local government.

3.3 Issues / criticisms of the current waste management frameworks

Since the introduction of the regulated waste classification framework in 1995, there have been significant advances in industrial processes, waste management practices, and other waste related technology. As a result of these changes the existing frameworks no longer reflect or properly account for current national and international waste management standards and practices.

As an example, the current method of classifying regulated waste does not take into account the type or concentration of the contaminant(s) in the waste. It also does not consider the risk associated with different contaminants which can vary substantially. For example, food processing waste, oily waters, and polychlorinated biphenyls (PCBs) are all classified and treated equally under the current regulated waste classification system. This means all regulated wastes are considered equal, despite the significant differences in the risks they pose to the environment and human health.

Furthermore the definition does not permit regulated waste to be re-classified even after undergoing a process of immobilisation or treatment to reduce the level of hazard and risk. This reduces the incentive to treat waste to reduce or remove its potential impacts on the environment and human health.

The current list of waste related ERAs is also in need of review, as since they were first introduced in the mid-1990s little has been done to update them. Since this time there have been significant changes in waste management practices and there has been an emergence of new waste management technologies and processes, which the waste related ERAs do not consider. This has resulted in:

- Unclear regulatory requirements or a perceived lack of support for new and emerging technologies;
  - ERA 61 does not clearly account for pyrolysis and gasification. ERA 61 is for incineration or treatment; however pyrolysis and gasification are technically neither of these processes. Similarly ERA 59 - tyre recycling, when originally conceived, only contemplated physical tyre shredding and crumbing. It does not consider processing end-of-life tyres using thermal processes, such as pyrolysis. This lack of support in the current system is likely to incur costs and prohibit resource recovery as opportunities to explore innovative technologies are lost or greatly reduced.
- Regulation of waste management activities that is not always commensurate with the level of risk that an activity poses;
  - Up to 100t of material may be processed in a day under ERA 20 - metal recovery. This material could include automotive components containing oils, heavy metals, and other high risk contaminants. The annual fee for this activity is $630. This fee is significantly disproportionate (in terms of fee value to risk) to holders of ERA 62 - waste transfer station, where the annual fee is $7000 and is required where greater than 30t or 30m^3 of lower risk general waste is received in a day (such as timber, green waste or concrete).
  - Similarly, a site may receive and recycle Used Lead Acid Batteries (ULABs) under ERA 52 Battery recycling. This ERA has an annual fee of $630. In contrast the actual site which receives acid or lead waste components separately (not contained within a battery) must be licensed under ERA 55 or ERA 58, and may be subject to an annual fee as high as $22,788.00.

The failure to recognise and regulate risks effectively could potentially result in negative impacts to the environment and may result in financial costs being incurred to investigate, clean-up, and undertake environmental remediation. These costs could be in addition to the potential health costs (human and financial) as a result of inadequate risk identification and management.

Similarly, the inconsistency of regulation, combined with limited flexibility within the current framework, could be perceived by prospective investors as the state not being open to emerging technologies. This may limit investment and result in revenue losses to the state associated with new products, services and employment.

The following table lists the cost, to industry and other stakeholders, of maintaining the status quo

Table 1: Costs of maintaining the current regulatory framework

Stakeholders	Costs
Industry	• Does not provide proportionate regulation based upon environmental risk • New and emerging technologies are not clearly captured which creates regulatory un-certainty discouraging investment, uptake and innovation • The inadequate fit between the regulations and newer technologies can lead to inconsistent application of the regulations, creating an uneven playing field • Lack of confidence in the Queensland Government's ability to maintain environmental law and contemporary waste management practices • Does not encourage treatment and immobilisation of wastes • Minimal incentives for generators to adopt waste minimisation or waste reduction practices
Local government	• Administrative and regulatory costs associated with devolved ERAs
State government	• Difficulties in applying existing waste ERAs to new and emerging technologies, in a consistent way • Does not achieve the objects of the *Waste Reduction and Recycling Act 2011* (WRR Act) because it does not promote waste avoidance and reduction, and resource recovery and efficiency actions
Community	• Decreased confidence in the Queensland Government's ability to maintain environmental law and contemporary waste management practices • Does not achieve the objects of the WRR Act because it does not promote waste avoidance and reduction, and resource recovery and efficiency actions

4.0 Policy options

Two policy options are presented within this RIS, which are described in sections 4.1 and 4.2.

4.1 Option 1: Maintain the status quo

Option 1 proposes that the existing regulated waste classification and waste-related ERAs, as described in sections 3.1 and 3.2 be retained.

4.2 Option 2: Adopt a new integrated risk-based regulatory framework

Option 2 proposes the adoption of a new integrated risk-based regulatory framework for classifying waste and regulating waste management activities. This option will introduce a new schedule of waste-related ERAs and regulated waste classification. Specifically this option proposes:

- a new system to classify regulated waste based upon the risk posed to the environment and human health; and
- a new risk-based schedule of five waste-related ERAs that incorporates the new waste classification system.

This option was developed in consultation with industry and other stakeholders. An initial draft framework was developed and released for public consultation in 2015 and feedback from this process together with ongoing consultation and discussion with industry has resulted in the development of the proposed risk-based regulatory framework.

A range of options were considered in the process of developing the framework as it is currently proposed for consultation. These options have not been included for consultation as providing multiple options for each waste-related ERA and regulated waste classification would add considerable complexity to the impact assessment and consultation process. For this reason a single integrated waste-related ERA and regulated waste classification framework option has been presented.

4.2.1 Proposed regulated waste classification system

An important component of the proposed regulated waste classification framework is the ability for waste generators to determine whether their waste is regulated and, if so, an appropriate level of risk-based categorisation. Under this system, regulated waste will be classified into one of three regulated waste categories or a not-regulated (NR) category, as follows:

- category 1 regulated waste (highest risk);
- category 2 regulated waste;
- category 3 regulated waste; or
- not-regulated (NR) (lowest risk).

Each waste category is based upon given threshold values for the identified hazard parameter(s). The threshold values for each waste category are based on national and international standards which are considered to be current best practice. A not-regulated (NR) category is provided for wastes which are below the Category 3 threshold limits. To establish their particular category, waste generators will have the option of either:

- adopting a default waste category for their waste (refer attachment F, table 10); or
- testing for parameters of known constituents, and comparing the results against threshold values for each parameter to determine the waste category (refer attachment G, table 11).

This is a significant departure from the current regulated waste classification system where all regulated wastes are considered equal and there is no opportunity to 'down-grade' the category of regulated waste or remove from regulated waste categorisation.

4.2.2 Proposed waste related ERAs

Under this option a new streamlined schedule of five waste-related ERAs will be introduced. The underlying structure of each ERA considers both the process/activity being undertaken and the classification of waste being managed. The waste classification reflects the proposed regulated waste risk classification system, whereby waste is classified as either not-regulated (lowest risk) or category 1, 2 or 3 regulated waste (highest to lowest risk).

Integration of the proposed waste categories with the waste related ERAs allows the overall risk, determined by both the activity and waste type, to be better quantified and proportionate regulation applied. For example, a facility receiving and processing category 3 regulated waste will now have a lower risk profile and annual fee than a facility that processes higher risk category 1 or 2 regulated waste. Similarly thermal processing of a category 2 waste will have a higher risk profile than processing that same waste using lower risk mechanised grinding processes.

Despite the reduction from twelve waste related ERAs to five under option 2, all existing activities will continue to be captured. The new system of waste related ERAs also includes support for new and emerging technologies such as pyrolysis, gasification and anaerobic digestion activities. The five proposed waste related ERAs are:

Proposed ERA	Description
ERA 53 Organic waste processing	Captures all composting and anaerobic digestion activities. All existing ERA 53 approvals for composting or soil conditioner manufacturing will be regulated under this ERA.
ERA 55 Waste processing or treatment	This ERA captures a range of waste processing, recycling and treatment activities. Activities currently regulated under existing ERAs 20, 33, 55, 58, 59, 61 and 62 may be captured within this ERA. Processes such as pyrolysis and gasification will also be captured here.
ERA 57 Waste transport	This ERA will continue to capture all existing regulated waste and tyre transport activities. Operators commercially transporting general waste will also be captured by this ERA.
ERA 60 Waste disposal	All existing ERA 60 waste disposal approvals will remain captured under this ERA.
ERA 62 Resource recovery and waste transfer	ERA 62 captures low level risk waste transfer and resource recovery activities. It allows for sorting, dismantling, baling and the associated temporary storage of waste. Activities currently regulated under existing ERA 20, 56 and 62 may be captured within this ERA. Storage of end-of-life tyres will also be captured under this ERA.

Attachment A provides a full list of the proposed ERAs. It also details the proposed licensing thresholds, activity descriptions, associated definitions and exemptions.

5.0 Regulatory impact assessment

5.1 Option 1: maintain the status quo

Under this option there would be no change to the current waste related ERA and regulated waste classification frameworks. This option presents no immediate impact to existing stakeholders as the existing licensing framework

and fee structure will be retained. There will be no changes to approval requirements, annual fees or administration work required under this option and therefore no impact assessment has been undertaken.

5.2 Option 2: Adopt a new integrated risk-based regulatory framework

Option 2 proposes significant changes to the current waste related ERA and regulated waste classification frameworks. This will result in potential direct and indirect impacts to existing ERA approval holders, local government, state government, waste generators and the community, and may include changes to:

- the type of ERA approval required and annual fee payable by existing approval holders;
- the number of activities and approvals administered by EHP and local governments;
- the associated revenue generated by EHP and local government through collection of annual fees; and
- the cost (additional) to waste generators where testing of waste material is required.

In addition to the above, some waste related activities that do not currently require an ERA approval may now be captured, and operators undertaking these activities will be required to obtain an ERA approval.

Costs to the state, from the implementation of Option 2 are most likely to be incurred through;

- updating regulatory tools, such as EHP website pages and associated record keeping databases;
- the upskilling of regulatory compliance staff, teaching and learning the new frameworks;
- 'pre-lodgement meetings' to inform approval holders of the new system and its application;
- the transition of existing approvals to the new framework; and
- additional regulatory inspections, particularly of the former local government 'devolved' ERA approvals.

The extent of these impacts has been assessed and summarised in the sections following.

5.2.1 Existing ERA approval holders (industry)

There are currently 1868 active waste related ERA approvals administered by both EHP and local government. The preferred option will require that these existing ERA approvals transition to new ERA under the proposed framework. Depending on the individual circumstances the annual fee may decrease, stay the same or increase under the new framework. It is important to note that where a site has approval to undertake multiple ERAs the annual fee payable is determined by the ERA that carries with the highest fee.

Attachment D provides guidance on how to determine the new ERA and threshold applicable for each existing ERA.

Table 2 summarises the number of existing ERAs and the new annual fee that may apply under option 2. Where the new annual fee requires a determination to be made on a case by case basis, the minimum and maximum fee that may be applicable is shown. Of the 1868 existing approvals it is known that approximately:

- 39% will have a fee increase (red shaded cells);
- 53% will have a fee decrease (green cells); and
- 8% may have an increase or decrease that requires a case by case determination (orange cells).

The process of transitioning existing ERA approval holders to the proposed framework will predominantly be an administrative process to reflect the new risk-based ERA and annual fee. Beyond this change the conditions of operation imposed under the existing ERA approvals (such as waste acceptance criteria, emission limits, reporting, and monitoring arrangements) will not be altered during the initial transition process and there should be minimal impacts on the day to day operation of these activities.

Table 2: Existing and new ERA thresholds and annual fees

Existing ERA thresholds	No. of approvals	Existing annual fee	New annual fee		Difference	Existing approval fee impact		
						Fee increase	Fee decrease	Unknown
20-(1) Metal recovery <100t day	166	$630.00	Min	$3,544.80	$2,914.80	166		
			Max	$7,342.80	$6,712.80			
20-(2a) Metal recovery >100t day or >10000t yr	21	$4,810.80	Min	$3,544.80	-$1,266.00			21
			Max	$7,342.80	$2,532.00			
20-(2b) Metal recovery >100t day or >10000t yr with fragmentiser	3	$12,913.20	Min	$5,317.20	-$7,596.00		3	
			Max	$11,140.80	-$1,772.40			
33-Crushing, milling, grinding or screening >5000t yr	121	$630.00	Min	$2,278.80	$1,648.80	121		
			Max	$5,317.20	$4,687.20			
52-Battery recycling	2	$630.00	Actual	$6,330.00	$5,700.00	2		
53-Composting&soil conditioner manufacturing >200t yr	78	$4,557.60	Actual	$9,368.40	$4,810.80	78		
55-(1) Regulated waste recycling or reprocessing	14	$2,278.80	Min	$6,076.20	$3,797.40	14		
			Max	$12,666.00	$10,387.20			
55-(2) Regulated waste recycling or reprocessing	30	$21,522.00	Min	$6,076.20	-$15,445.80		30	
			Max	$12,666.00	-$8,856.00			
56 Regulated waste storage	121	$5,317.20	Min	$4,304.40	-$1,012.80			121
			Max	$7,342.80	$2,025.60			
57-(1) Regulated waste transport – end-of-life tyres	48	$630.00	Actual	$506.40	-$123.60		48	
57-(2a) Regulated waste transport 1 to 5 vehicles	685	$1,772.40	Min	$253.20	-$1,519.20		685	
			Max	$1,266.00	-$506.40			
57-(2b) Regulated waste transport 6 to 35 vehicles	109	$5,317.20	Min	$1,519.20	-$3,798.00	30	79	
			Max	$8,862.00	$3,544.80			
57-(2c) Regulated waste transport >36 vehicles	18	$10,634.40	Actual	$9,115.20	-$1,519.20		18	
58-Regulated waste treatment	39	$22,788.00	Min	$6,076.80	-$16,711.20		39	
			Max	$12,660.00	-$10,128.00			
59-Tyre recycling	13	$630.00	Actual	$6,076.80	$5,446.80	13		
60-(1a) Waste disposal <50000t yr (1a)	53	$12,660.00	Actual	$20,762.40	$8,102.40	53		
60-(1b) Waste disposal >50000t but <100000t yr (1a)	10	$20,762.40	Actual	$28,358.40	$7,596.00	10		
60-(1c) Waste disposal >100000 but <200000t yr (1a)	5	$25,320.00	Actual	$32,662.80	$7,342.80	5		
60-(1d) Waste disposal >200000t yr (1a)	37	$27,852.00	Actual	$35,194.80	$7,342.80	37		
60-(2a) Waste disposal >50t but <2000t yr (1b)	72	$3,291.60	Actual	$5,317.20	$2,025.60	72		
60-(2b) Waste disposal >2000t but <5000t yr (1b)	34	$5,064.00	Actual	$7,849.20	$2,785.20	34		

Existing ERA thresholds	No. of approvals	Existing annual fee	New annual fee		Difference	Existing approval fee impact		
						Fee increase	Fee decrease	Unknown
60-(2c) Waste disposal >5000t but <10000t yr (1b)	22	$7,342.80	Actual	$9,874.80	$2,532.00	22		
60-(2d) Waste disposal >10000t but <20000t yr (1b)	17	$10,381.20	Actual	$12,660.00	$2,278.80	17		
60-(2e) Waste disposal >20000t but <50000t yr (1b)	15	$13,419.60	Actual	$17,724.00	$4,304.40	15		
60-(2f) Waste disposal >50000t but <100000t yr (1b)	18	$14,685.60	Actual	$20,762.40	$6,076.80	18		
60-(2g) Waste disposal >100000t but 200000t yr (1b)	7	$18,483.60	Actual	$22,788.00	$4,304.40	7		
60-(2h) Waste disposal >200000t yr (1b)	6	$24,307.20	Actual	$27,852.00	$3,544.80	6		
61-(1) Waste incineration & thermal treatment (green waste, paper, cardboard)	11	$630.00	Actual	NA	-$630.00		11	
61-(2a) Waste incineration & thermal treatment <5000t yr general waste	5	$4,557.60	Actual	$9,621.60	$5,064.00	5		
61-(2b) Waste incineration & thermal treatment >5000t yr general waste	2	$7,596.00	Actual	$9,621.60	$2,025.60	2		
61-(3a) Waste incineration & thermal treatment - clinical	12	$12,913.20	Min	$12,660.00	-$253.20			12
			Max	$15,192.00	$2,278.80			
61-(3b) Waste incineration & thermal treatment – regulated waste	6	$10,381.20	Min	$10,128.00	-$253.20			6
			Max	$15,192.00	$4,810.80			
62-Waste transfer station operation >30t or 30m^3 day	68	$7,849.20	Min	$2,278.80	-$5,570.40		68	
			Max	$5,317.20	-$2,532.00			
					Total	**727**	**981**	**160**

5.2.2 State government

As at 20 January 2016, reporting data indicated a total of 1868 waste related ERA approvals administered by EHP and local government, comprised of:

- 1708* waste-related ERA approvals administered by EHP; and
- 160 devolved waste-related ERA approvals administered by local government.

*This number reflects the total number of waste ERAs administered. It does not take into account instances where multiple ERAs are authorised on a single approval and the number of unique approvals may be less. For example, three waste-related ERAs may be administered under a single approval.

Annual fee revenue

EHP currently collects an estimated $9,054,154.80 in annual fees arising from 1708 existing waste related approvals. Under option 2 all waste-related ERAs, including those currently devolved to local government will become the responsibility of EHP (with the exception of 11 ERA 61(1) approvals which will no longer require an ERA). This means that EHP will be responsible for administering 1857 waste related approvals.

The annual fees associated with each of these existing approvals will also change. This will impact the total number of activities administered by EHP and the associated annual fee revenue. In addition to this, EHP will also be responsible for the ongoing regulation of any new activities that may be captured under the new framework.

As discussed in section 5.2.1, the new annual fee payable cannot be accurately determined for all of the existing waste related ERAs. Therefore it is difficult under the new framework to calculate a precise annual fee revenue figure, as the new annual fee for some existing activities may be one of several options.

A risk evaluation process that considers both the activity being undertaken and the classification of waste being handled has been used, to develop an appropriate aggregate environmental score (AES) for each of the proposed ERAs. The annual fee for each ERA is then derived by multiplying the AES and a fee unit of $253.20 (current as of 01 July 2016). The AES value is designed to reflect the risk associated with an activity, and is used to calculate the annual fee for all ERAs listed in schedule 2 of the EP Reg.

Of the 1868 existing ERA approvals the new ERA threshold is known for 1267 (including 11 approvals that will no longer require an ERA). This leaves 601 approvals where the new ERA will need to be determined on a case by case basis. This will require assessment of the activity (process) being undertaken and the waste category classification of the waste being managed. In order to give an indicative figure, an estimate of the likely annual fee revenue has been calculated below, under two different scenarios.

Scenario 1 – conservative minimum annual revenue estimate

Scenario 1 assumes a conservative assessment that allocates each existing approval to the new ERA threshold option that has the lowest annual fee. This scenario produces an estimate of the minimum annual fee revenue.

This scenario is considered to be a minimum baseline and is unlikely to occur.

Scenario 2 – more probable annual revenue estimate

Scenario 2 adopts a less conservative approach and apportions existing approvals to new ERA thresholds based upon a percentage breakdown of regulated waste categories, as follows:

- 21% category 3 regulated waste;
- 44% category 2 regulated waste; and
- 35% category 1 regulated waste.

These percentages have been calculated by analysing existing regulated waste tracking code data to ascertain a likely waste categorisation breakdown under the proposed regulated waste classification framework. This gives an indicative estimate of the percentage split of category 1, 2 and 3 regulated wastes.

This is considered to be a more likely scenario than option 1.

Scenario summary

Table 3 summarises the estimated number of approvals administered by EHP and the annual fee revenue collected under the existing framework, and scenarios 1 and 2. Further details of the calculations used to derive these figures are provided in Attachment E, table 9.

Table 3: Estimated state government ERA annual fee revenue

	No. of approvals	Estimated Annual fee Revenue	Average annual fee per approval
Existing framework	1708	$9,054,154.80	$5,301.03
Scenario 1	1857*	$9,370,932.00	$5,046.27
Scenario 2	1857*	$10,175,601.50	$5,479.59

**Includes 160 existing approvals currently devolved to local government.*
Excludes 11 existing ERA61(1) approvals that will no longer require an ERA.

5.2.3 New activities

Changes in ERA licensing criteria and thresholds means that some activities that are not currently regulated may now require an ERA approval. As these activities are not captured under the existing regulatory framework, the number of operators or facilities that may now require an ERA cannot be accurately determined. These new activities and the respective ERAs in which they will be regulated are summarised in table 4. Please refer to Attachment A for further information on the licensing details for these activities.

Table 4: Regulation of new activities

New activity	New ERA	Annual fee	New ERA criteria	Known existing activities
Tyre storage	ERA 62(3)	$3,544.80	Storing greater than 4t or 500 equivalent passenger units (EPUs) of tyres at any one time.	This activity is not currently regulated. The number of existing operators that may be captured cannot be determined.
*Anaerobic digestion	ERA 53(2)	$6,076.80	Sites receiving greater than 200t of organic material per year for the purpose of operating an anaerobic digester. Does not capture anaerobic digestion of material produced onsite in relation to an existing ERA such as a waste water treatment plant or abattoir.	This activity is not currently regulated. The number of existing operators that may be captured cannot be determined.
Waste transfer (receiving less than 30t or 30m^3 of waste per day)	ERA 62(2a) or ERA 55(1a)	$3,544.80 - $5,317.20	Waste transfer station facilities receiving less than 30t or 30m3 per day do not currently require an ERA approval. This requirement has been removed and all commercial waste transfer station facilities will require an ERA approval.	This activity is not currently regulated. The number of existing sites that may be captured is not known.
General waste transport	ERA 57(3)	$253.20	Persons commercially transporting general waste in loads greater than 750kg must obtain an approval.	This activity is not currently regulated. The number of existing operators that may be captured cannot be determined.

**Biomethane also known as biogas, is a hydrocarbon gas produced from the breakdown of organic matter in the absence of Oxygen. Biomethane, including gas produced from waste landfills and sewage treatment plant is defined as petroleum and fuel gas under the Petroleum and Gas Act 2004 and the Petroleum and Gas Regulations.*

There are currently 64 active biogas producing facilities, including waste treatment plants, landfills, piggeries, egg production and abattoirs. These operations are regulated by the Department of Natural Resources and Mining (DNRM) under S675 (5) (e) of the *Petroleum and Gas (Production and Safety) Act 2004* and S10 (3) (c) of the *Petroleum and Gas (Production and Safety) Regulation 2004*.

It is not expected that these facilities will require ERA 53 as the organic material is produced onsite in relation to an existing ERA such as a waste water treatment plant or abattoir.

5.2.4 Local government

Under the current waste related ERA framework ERA 20 (metal recovery) and ERA 61 (waste incineration and thermal treatment) activities are devolved to local government. Under the new waste related ERA framework these activities and the associated approvals will transfer to the State. This will result in a decrease in annual fee revenue for some local governments, however this may be potentially offset by a reduced compliance and licensing workload.

This change impacts a total of 160 devolved approvals[#] for ERA 20 metal recovery. Table 5 shows the number of existing ERA 20 approvals and total annual fee revenue, for each impacted local government. There are currently no ERA 61 approvals administered by local government. However, any future approvals for ERA 61 will be administered by EHP.

Table 5: Existing local government devolved activities and annual fees

Local Authority	*ERA 20(1) approval holders	**ERA 20(2)(a) approval holders	Total existing fees
Banana Shire Council	1	0	$630.00
Brisbane City Council	24	6	$43,984.80
Bundaberg Regional Council	4	1	$7,330.80
Burdekin Shire Council	2	0	$1,260.00
Cairns Regional Council	9	0	$5,670.00
Cassowary Coast Regional Council	3	0	$1,890.00
Fraser Coast Regional Council	5	0	$3,150.00
Gladstone Regional Council	3	1	$6,700.80
Gold Coast City Council	27	0	$17,010.00
Livingstone Shire Council	1	0	$630.00
Mackay Regional Council	9	3	$20,102.40
Noosa Shire Council	1	0	$630.00
Redland City Council	4	0	$2,520.00
Rockhampton Regional Council	7	0	$4,410.00
Somerset Regional Council	0	3	$14,432.40
South Burnett Regional Council	2	0	$1,260.00
Southern Downs Regional Council	4	3	$16,952.40
Sunshine Coast Regional Council	6	1	$8,590.80
Toowoomba Reginal Council	14	1	$13,630.80
Townsville City Council	9	1	$10,480.80
Western Downs Regional Council	3	0	$1,890.00
Whitsunday Regional Council	4	0	$2,520.00
Total	**142**	**18**	**$185,676.00**

Notes:
*Annual fee for ERA 20(1) is $630.00
**Annual fee for ERA 20(2) (a) is $4810.80
EHP Annual report on the administration of the EP Act 1994 for the 2013 – 2014 financial year

5.2.5 Waste sampling and testing costs

Sampling and testing costs for waste generators are not expected to increase under the proposed regulated waste classification system. It is anticipated that most generators will use the default table (Attachment F) and be automatically categorised into one of the three waste categories or the not regulated waste category, thus avoiding the need to test their waste.

The main exception will be where a generator would like their waste to be reclassified to a category lower than their existing default category. In these cases the generator may elect to have the waste material tested to ascertain the concentration of the hazard parameter(s) and therefore demonstrate a lower waste classification category.

Where a waste generator has a large amount of homogenous or mixed waste and can demonstrate a consistency in the concentration/ type of the hazard parameter(s), ongoing testing may not be required. However, for unmixed or heterogeneous waste, a waste generator may be required to test and ensure that the concentration/ type of the hazard parameter(s) continue to meet the category thresholds for each load of waste.

As a result of the proposed framework there isn't expected to be any increase in costs for a majority of waste generators. Waste generators are only likely to test in order to demonstrate a lower waste classification to reduce the costs associated with transport, disposal, processing or treatment of the waste.

This may not be the case for all wastes and waste generators, and an exact figure is difficult to quantify as there is no way of anticipating the number of generators who may elect to undertaking waste testing.

5.2.6 Implementation and transitional impacts

If adopted, option 2 will require that 1868 existing waste related ERA approvals transition to the new ERA framework. Of these approvals the new waste related ERA category and annual fee is known for 1267 approvals. These approvals will transition directly to a new ERA under the new framework. Transitioning these approvals will require less compliance and administrative effort than those approvals that will need to be determined on a case by case basis.

Where a case by case determination is required this will require liaison between EHP officers and the approval holder to determine the applicable new ERA and relevant threshold. This process will require an increased level of administrative and compliance resources of EHP. Administrative resources will also be required of local government where devolved approvals are transferred to EHP.

5.3 Cost benefit summary

Table 6: Cost and benefit summary (Option 2)

Option 2: Adopt a new integrated risk-based regulatory framework		
Stakeholders	**Benefits**	**Costs**
Industry	• Annual fees for some activities may decrease • Provides proportionate regulation for waste related activities • Clearer regulation and standards for new and emerging technologies, such as thermal treatment • Fairer playing field • Increased confidence in the Queensland Government's ability to maintain the contemporaneity of environmental law and management practices • Requirement for currently unregulated activities to obtain approval.	• Annual fees for some activities may increase • Increased administration for existing holders in transitioning to a new equivalent ERA and threshold • New costs associated with the implementation and practice of the new framework including waste transport and management • Possible delays and costs in implementing the new framework • Requires education and training to ensure a smooth transition and the benefits of a new framework are realised • A cultural change for the classification and management of regulated wastes.
Local government	• Reduction in administration costs, following the transfer of some ERAs to the state.	• Recentralising the management of some ERAs could cause a financial loss to local councils • Implementation costs associated with transitioning to the new system • A cultural change for the classification and management of regulated wastes which will take time to fully implement. • Change to compliance and licensing workloads.
State government	• Contemporary prescribed waste ERAs that are tailored to new and emerging technologies that are also flexible enough to capture future technologies • Improved compliance and assessment capacity due to streamlined ERA regulatory requirements • Improved environmental outcomes as higher risk wastes and activities will be more easily identified through the new regulatory framework allowing improved targeted compliance programs.	• Costs associated with developing and implementing a new framework • A cultural change for the classification and management of regulated wastes which will take time to fully implement.
Community	• Increased confidence in government ability to ensure that environmental risks are appropriately managed • High risk activities are appropriately managed • Requirement for currently unregulated activities to obtain approval.	• New costs associated with the implementation and practice of the new framework including waste transport and management.

5.4 Preferred policy option

Option 2 is the preferred policy option. This option was developed to address the issues and criticisms associated with the existing management frameworks.

Despite the initial administrative costs associated with implementing and transitioning to the new framework, it is envisaged that in the longer term option 2 will achieve all of the stated policy objectives of the review:

1. improved classification of waste based on the level of risk posed to the environment or human health;
2. management of waste ERAs that is commensurate to risk;
3. development of waste ERAs that support new and emerging technologies;
4. consistency for operators undertaking waste ERAs;
5. a regulatory environment that encourages innovation in waste management practices; and
6. a framework that does not impact on the viability of established industries and encourages capital investment, economic development and employment.

Conversely, maintaining the status-quo (option 1) only partially addresses policy objective number 6 (a framework that does not impact on the viability of established industries) and it is therefore not considered to be the preferred policy option.

6.0 Consultation process

6.1 Regulated waste classification framework

Between July 2014 and September 2015, EHP carried out preliminary consultation on the proposed regulated waste classification framework and the proposed changes to the waste related ERAs.

Initial consultations commenced in July 2014 when key external stakeholders and government departments were invited to comment on the proposed policies. The feedback was considered by EHP and the appointed consultants in preparing the Draft Regulated Waste Classification Framework ('Draft Framework'), which was delivered in March 2015.

The Draft Framework was further consulted on during a series of workshops and face-to-face meetings in South East and Far North Queensland over the period May to July 2015. EHP released the Draft Framework for public consultation in September 2015.

6.2 Waste-related ERA framework

The review of the waste related ERAs commenced in 2013 in consultation with industry and other stakeholders. A draft framework was developed and released for public consultation on 06 August 2015 and remained open for comment until 25 September 2015.

During this period submissions were received from 20 stakeholders and the comments provided have been used to inform the development of the final ERA framework that is the subject of this RIS.

7.0 Consistency with other policies and regulation

7.1 Competition principles agreement

The guiding principle of the Competition Principles Agreement, under National Competition Policy, is that legislation should not restrict competition unless it can be demonstrated that:

(a) the benefits of the restriction to the community as a whole outweigh the costs; and
(b) the objectives of the legislation can only be achieved by restricting competition.

The proposed reform of waste related ERAs will apply equally to all parties concerned and will not restrict competition. Given that one of the key policy objects is to provide consistent regulation for all persons undertaking waste management policies, the competition principles are arguably enhanced.

7.2 Fundamental legislative principles

The fundamental legislative principles under section 4 of the *Legislative Standards Act 1992* were considered during development of the proposed regulatory reforms. In light of these principles, the government does not intend to create inconsistencies with the maintenance of 'the rights and liberties of individuals, and the institution of Parliament' in implementing the new reforms.

8.0 Implementation, evaluation and compliance support strategy

The process of transitioning from the current to the new regulatory framework will likely take more than 12 months to complete. The process is likely to be carried out in stages, and may involve using the ERA approval anniversary date as the time at which an approval's transition will commence. However, the actual transition process and commencement date will be determined following consultation with the relevant regulatory departments and other stakeholders. This will be to ensure that both the administrative authorities and existing approval holders have sufficient time to prepare and make necessary changes that may be needed, particularly in instances where there may be an increase in annual fees.

As stated above, transition is likely to take at least 12 months to complete. As a result a review of completion, required to determine the effectiveness of the process, will be undertaken within 24 months.

Criteria for 'success' could be assessed on the following:

- variance between the projected and actual number of approvals transitioned;
- variance between the projected and actual revenue generated;
- whether the revenue generated covers the relevant administration costs;
- external feedback from industry and stakeholders; and
- internal feedback from relevant divisions within EHP.

Attachment A: Proposed ERA framework

ERA 53 Organic material processing

53 Organic material processing

(1) Organic material processing (the ***relevant activity***) consists of operating a facility that receives greater than 200 tonnes (t) of organic material in a year for composting or anaerobic digestion

(2) The relevant activity does not include undertaking composting or anaerobic digestion where the organic material –
- (i) is generated from agriculture or livestock production activities;
- (ii) processed on a site where agricultural or livestock production activities are carried out; and
- (iii) processed and provided for subsequent use without fee or charge.

(3) In the following table, the aggregate environmental score (AES) for the relevant activity is the score stated opposite the threshold within which the activity is carried out.

Threshold	**AES**	**3**
1 processing organic material by -		
(a) composting	37	C
(b) anaerobic digestion	24	C

(4)

In this section—

organic material is material that is comprised of plant or animal material, or wastes derived through the processing such materials. To remove any doubt, such material includes organic waste.

organic waste —

(a) includes the following, or an organic waste of similar characteristics:
- (i) a substance used for manufacturing fertiliser for agricultural, horticultural or garden use;
- (ii) animal manure;
- (iii) biosolids;
- (iv) cardboard and paper waste;
- (v) fish processing waste;
- (vi) food and food processing waste;
- (vii) green waste;
- (viii) poultry processing waste;
- (ix) waste generated from an abattoir; but

(b) to remove any doubt, organic waste does not include any of the following:
- (i) clinical or related waste;
- (ii) quarantine waste regardless of its composition;
- (iii) any synthetic or artificially synthesised compound, chemical or substance, regardless of its composition;
- (iv) contaminated soil regardless of its composition.

anaerobic digestion refers to the process in which microorganisms break down organic material in the absence of oxygen for the purpose of producing biogas

composting refers to the process in which microorganisms break down organic material for the purpose of producing compost or soil conditioners

Summary

The ERA captures composting and anaerobic digestion activities of organic material. All facilities receiving 200t or more of organic material in a year will be required to obtain an approval.

The ERA is not intended to capture anaerobic digestion or composting activities where the material is processed and subsequently used on the site where it was produced. For example, a wastewater or sewage treatment plant operating an onsite anaerobic digester to process waste produced as a by-product of an existing lawful activity, will not be required to obtain an ERA 53 approval. If however the treatment plant commenced accepting waste from a third party under a commercial arrangement an ERA 53 approval would then be required.

This ERA does not include on-farm composting or anaerobic digestion where:

- the waste is produced, processed and subsequently used on a site where agricultural or livestock activities are carried out; and
- the processing and subsequent supply of the product is provided without fee or charge.

ERA 55 Waste processing or treatment

55 Waste processing or treatment

(1) Waste processing or treatment (the ***relevant activity***) consists of operating a facility that receives waste or contaminated soil for the purpose of –

(a) processing to extract resources or produce products; or

(b) treating to render the waste or contaminated soil less hazardous

(2) In the following table, the aggregate environmental score (AES) for the relevant activity is the score stated opposite the threshold within which the activity is carried out.

Threshold	**AES**	**3**
1. Mechanically processing or treating -		
(a) more than 5000t of general waste in a year	21	C
(b) category 3 regulated waste	24	C
(c) category 2 regulated waste	32	C
(d) category 1 regulated waste or contaminated soil	44	C
2. Thermally processing or treating -		
(a) general waste	38	C
(b) category 3 regulated waste	40	C
(c) category 2 regulated waste	48	C
(d) category 1 regulated waste or contaminated soil	60	C
3. Otherwise processing or treating -		
(a) general waste	28	C
(b) category 3 regulated waste	30	C
(c) category 2 regulated waste	38	C
(d) category 1 regulated waste or contaminated soil	50	C

(3) In this section—

mechanical processing, in relation to waste, includes using processes such as crushing, milling, grinding, shredding or other mechanised sorting or processing equipment

Examples –

shredding tyres, operating a trommel, glass imploder, concrete crusher or green waste shredder

thermally processing or treating, in relation to waste, means applying heat to a waste to change its chemical composition

Examples –

gasification, pyrolysis, plasma arc or incineration facility

otherwise processing or treating, in relation to waste, means processing or treating using methods other than mechanical or thermal as defined in this section

Examples—

bioremediation, chemical fixation or autoclaving

Summary

ERA 55 captures a range of waste processing, recycling and treatment activities. It includes specific categories for processing or treating waste using mechanical or thermal processes. A separate category titled ‘otherwise processing or treating’ is included for processes that do not fall within the mechanical or thermal processing definitions. Each category includes separate thresholds for general waste and category 1, 2 and 3 regulated wastes.

Activities currently undertaken under the following ERAs may now be captured within this ERA:

- ERA 20 metal recovery (with fragmentiser)
- ERA 33 crushing, milling, grinding or screening (of waste material only)
- ERA 55 regulated waste recycling or reprocessing
- ERA 58 regulated waste treatment
- ERA 59 tyre recycling
- ERA 61 waste incineration or thermal treatment
- ERA 62 waste transfer station

Mechanical processing or treatment

This category captures crushing, shredding, screening or other mechanised processes. Under this category, the following existing activities may now be regulated:

- ERA 20 Metal recovery where a fragmentiser is used;
- ERA 59 Tyre recycling, using processes such as shredding or crumbing;
- ERA 33 Crushing, milling grinding or screening of waste material; or
- ERA 52 (battery recycling), ERA 55 (regulated waste recycling or reprocessing) or ERA 58 (regulated waste treatment) activities where processing or treatment is undertaken using processes that fall within the definition of mechanical processing or treating.
- ERA 62 Waste transfer station activities where processing, sorting or screening of material occurs using mechanical equipment such as a trommel, glass imploder or other heavy machinery or mechanised processes.

Up to 5000t per annum of general waste may be mechanically processed without requiring an ERA 55 approval. In cases where less than 5000t of general waste is being processed an ERA 62 waste transfer and resource recovery approval may still be required.

Thermal processing or treatment

The category captures thermal processes such as incineration, pyrolysis and gasification where heat is applied to a waste to change its chemical composition for the purpose of:

- processing to extracting resources or producing products; or
- treating to render the waste or contaminated soil less hazardous.

With the exception of autoclaving, all existing ERA 61 waste incineration or thermal treatment activities will be captured within this category.

Autoclaving is not captured is this category as the process does not alter the chemical composition of the material. It is instead captured under the otherwise processing or treating category within this ERA.

Otherwise processing or treating

This category captures all other waste processing or treatment activities that do not fall within the mechanical or thermal treatment categories within this ERA. This may include bioremediation, chemical fixation or autoclaving activities.

ERA 57 Waste transport

57 Waste transport

(1) Waste transport (the ***relevant activity***) consists of transporting in a vehicle:
  (a) regulated waste; or
  (b) greater than 750kg of general waste

(2) The relevant activity does not include transporting:
  (a) up to 175kg of non-friable asbestos
  (b) on a non-commercial basis any of the following:
    (i) less than 250kg of regulated waste other than asbestos; or
    (ii) any amount of general waste.

(3) In the following table, the aggregate environmental score (AES), if any, for the relevant activity is the score stated opposite the threshold within which the relevant activity is carried out.

Threshold	**AES**	**3**
1 transporting end-of-life tyres	2	
2 transporting regulated waste	1	
3 transporting general waste	1	

(4) In this section—
vehicle includes the part of an aircraft, boat, rolling stock, semi-trailer, tanker, trailer or truck, used to transport the regulated waste.
non-commercial for the purpose of this section means self-haul waste from a domestic premises or waste transported on a gratuitous basis.

Summary

Operators transporting any quantity of regulated waste on a commercial basis will be captured under this ERA. Transport of up to 250kg of regulated waste on a non-commercial basis may be undertaken without an approval.

An annual fee of $253.20 will be payable for each regulated waste transport vehicle registered with the EHP. This is intended to provide a fairer and more equitable fee structure than that provided under the current framework. This will be particularly beneficial for small or single vehicle operations as the minimum annual fee has been reduced to $253.20 for a single vehicle license (previously this was $1712.90 for one to five vehicles). Similarly, a reduced annual fee of $1223.50 will now apply for 5 vehicles.

The maximum fee will be capped at 36 vehicles ($9,115.20) after which additional vehicles can be registered without further increasing the annual fee.

The annual fee for tyre transport is fixed at $506.40, irrespective of the number of vehicles in use.

Asbestos

The requirements for persons to hold a waste transport ERA approval for asbestos material now align with the asbestos removal licensing requirements set by Work Health and Safety Queensland. Under this arrangement, a person will be required to hold a waste transport ERA approval when transporting any amount of friable asbestos or, greater than 175kg of non-friable asbestos.

This approach:

- provides consistency with work health and safety licensing requirements e.g. a person removing asbestos is required to be licensed under work health and safety regulations is also required to hold a waste transport ERA and complete associated tracking documentation;
- enables licensing requirements to be determined by the quantity and type of asbestos material removed and not the commercial nature of the activity;
- minimises the cost and regulatory requirements associated with lawfully transporting asbestos waste, therefore reducing the incentive to improperly dispose of asbestos waste by:
    - Introducing a lower annual ERA fee for licensed asbestos waste transporters; and
    - Allowing the removal of up to ten square meters of non-friable asbestos without requiring an approval(for both commercial and non-commercial operators); and
    - Reducing transport licensing costs for homeowners or commercial tradespersons, such as plumbers and electricians (for whom the primary business is not asbestos removal), to allow the transport of up to ten square meters of non-friable asbestos waste;
- means that regardless of any ERA requirements all asbestos material must be appropriately handled and managed in accordance Work Health and Safety handling requirements.

General waste transport

Operators transporting greater than 750kg of general waste on a commercial basis will be required to obtain a waste transport approval. The grounds for this inclusion are that:

- the transport of general waste poses an environmental risk, if not managed properly;
- inclusion will ensure that all persons transporting waste are aware of their obligations to properly manage all wastes;
- all persons transporting waste will be required to operate within the same environmental standards;
- it will help waste generators and industry identify legitimate waste transport operators.

A fixed annual fee of $253.20 is proposed for persons transporting general waste. This is irrespective of the number of vehicles in use and operators will not be required to register vehicle details with the department.

ERA 60 Waste disposal

60 Waste disposal

(1) Waste disposal (the relevant activity) consists of only one of the following—

(a) operating a facility for disposing of:

(i) regulated waste; or

(ii) regulated waste and any, or any combination, of the following—

(A) general waste;

(B) limited regulated waste;

(C) if the facility is in a scheduled area—no more than 5t of untreated clinical waste in a year;

(b) operating a facility for disposing of, in a year, 50t or more of waste consisting of:

(i) only general waste; or

(ii) general waste and either, or a combination, of the following—

(A) a quantity of limited regulated waste that is no more than 10% of the total amount of waste received at the facility in a year;

(B) if the facility is in a scheduled area—no more than 5t of untreated clinical waste.

(c) maintaining a waste disposal facility in post closure care

(2) The relevant activity does not include using clean earth as fill.

(3) In the following table, the aggregate environmental score (AES) for the relevant activity is the score stated opposite the threshold within which the relevant activity is carried out.

Threshold	**AES**	**3**
1 operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a)—		
(a) Less than 50,000t	54	C
(b) 50,000t to 100,000t	85	C
(c) More than 100,000t but not more than 200,000t	111	C
(d) More than 200,000t	121	C
2 operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(b)—		
(a) More than 50t but not more than 2000t	21	C
(b) More than 2000t but not more than 5000t	31	C
(c) More than 50,000t but not more than 10,000t	39	C
(d) More than 10,000t but not more than 20,000t	50	C
(e) More than 20,000t but not more than 50,000t	70	C
(f) More than 50,000t but not more than 100,000t	82	C
(g) More than 100,000t but not more than 200,000t	90	C
(h) More than 200,000t	110	C
3 maintaining a waste disposal facility in post closure care	17	

(4) In this section—

clean earth means natural material such as clay, gravel, sand, soil or rock that is not contaminated with waste or otherwise classified as contaminated soil

facility includes a naturally occurring or constructed hollow or pit, including, for example, a gully, mining shaft, quarry, but does not include a hollow or pit on a farm used for receiving and disposing of general waste produced on the farm

post closure care refers to a waste disposal facility that is closed, undergoing rehabilitation and no longer accepting waste for the purpose of disposal

regulated waste for the purpose of this section includes category 1, 2 and 3 regulated waste

Summary

A new threshold 60 (3) with a lower annual fee has been introduced for waste disposal facilities that are no longer accepting waste and are undergoing post closure care. This is intended to capture landfills that are currently regulated under the ERA framework only. Historic landfills that did not hold or were not required to hold an ERA 60 approval will not be retrospectively captured.

The existing ‘clean earthen material’ definition has been removed and replaced with a new ‘clean earth’ definition***.*** This is intended to restrict the disposal of C&D waste that was permitted under the current clean earthen material definition without obtaining an approval for ERA 60. This approach recognises that C&D waste is rarely presented without contamination and would not meet the definition of clean earthen material that currently applies. Sites accepting C&D waste material will be subject to the same regulatory requirements as other licensed waste disposal facilities accepting other similar wastes.

ERA 62 Waste transfer and resource recovery facility

62 Waste transfer and resource recovery facility

(1) Resource recovery and transfer facility (the *relevant activity*) consists of operating, on a commercial basis or in the course of carrying on a commercial enterprise, a facility that receives waste for sorting, dismantling, baling or temporary storage.

(2) In the following table, the aggregate environmental score (AES) for the relevant activity is the score stated opposite the threshold within which the activity is carried out.

Threshold	**AES**	**3**
1 baling of clean source separated recyclables	9	C
2 sorting, dismantling or temporarily storing -		
(a) general waste	14	C
(b) category 3 regulated waste	17	C
(c) category 2 regulated waste	25	C
(d) category 1 regulated waste	29	C
3 sorting or temporarily storing end-of-life tyres	14	C

(3) In this section -

resource recovery and transfer facility means a facility used for –

(a) receiving, sorting, dismantling or baling waste; and

(b) temporarily storing waste before moving it, from the site where the relevant activity is carried out, for recycling, processing, treatment or disposal.

(4) The relevant activity does not include:

(a) storing waste in transit;

(b) local government operated facilities accepting not more than 2500t or 2500m^3 of waste per year;

(c) temporarily storing:

(i) not more than 4000L or 4t of general waste or category 3 waste at any one time;

(ii) not more than 2000L or 2t of category 1 or 2 regulated waste at any one time;

(iii) not more than 4t or 500 equivalent passenger tyre units (EPUs), or tyres or parts of tyres at any one time;

(iv) chemically treated power poles;

(v) clinical waste consisting only of sharps in sharps containers that comply with AS 4031 or AS/NZ 4261 for a period of up to 28 calendar days;

(vi) waste in accordance with an accredited product stewardship scheme or take-back scheme; or

(vii) waste at a retail location or service premises where the waste is awaiting removal.

Examples for subparagraph (c)(vi)— a motor vehicle workshop, tyre retailer, repair shop, battery retailer

dismantling means to disassemble or take apart into separate pieces.

in-transit storage means storing waste for no longer than five days where the waste is not unloaded, decanted or removed from the vehicle or storage container in which it is being transported

end-of-life tyre means a used tyre that has been removed from a vehicle

Summary

ERA 62 captures low level risk waste transfer and resource recovery activities. It allows for sorting, consolidating, dismantling, baling and the associated temporary storage of waste. Further processing of waste using mechanised processes such as crushing, shredding or other similar processes will require an additional relevant ERA 55 approval for mechanical processing. This approach allows delineation between smaller (lower-risk) sorting facilities and those undertaking additional processing onsite that presents increased noise, emissions and containment risks.

Regulated waste storage

Existing ERA 56 regulated waste storage activities will be captured under this ERA. The primary point of difference is that regulation under this ERA does not authorise indefinite storage of waste. Instead it is intended to allow associated or temporary storage until such time that sufficient waste is consolidated prior to sending the waste to another facility for disposal, treatment or processing. A timeframe has not been specified given the variability and practicality of applying a reasonable ‘one size fits all timeframe’. Large variances in storage time requirements may be present due to a variety of factors, including:

- processing or disposal facilities may not be available locally;
- facilities in regional areas may take longer to consolidate sufficient waste for it to be cost effective to transport off site; or
- some waste types by nature are less common and may take longer to accumulate sufficient quantities.

Tyre storage

Receiving and consolidating tyres are also captured within this ERA. A separate threshold is provided for facilities that receive and store greater than 4t or 500 equivalent passenger tyre units (EPUs) of end-of-life tyres at any one time. This means that facilities receiving, consolidating and storing tyres have the same level of regulation and operate to the same management standards as other waste facilities.

An end-of-life tyre is said to mean ‘a used tyre that has been removed from a vehicle’. This will include any facility receiving and storing greater than 4t or 500 EPUs of end-of-life tyres, irrespective of their potential or perceived reuse value. One EPU is equivalent to 8kg for an end-of-life tyre.

Removal of tonnage based licensing threshold

The 30t or 30m^3 per day threshold no longer applies and all commercial facilities receiving waste will be required to hold an ERA 62 approval, with some exemptions, which are outlined below.

Small scale local government facilities

Local government facilities accepting not more than 2500t or 2500m^3 of waste material per year. Small scale local government facilities are exempted for the following reasons:

- the location of local government facilities are known and advertised, unlike 'rogue' or 'backyard' operators;
- records are kept that allow the amount of waste being received at the facility to be determined. E.g. the number and volume of bins collected from each site;
- these facilities should not be competing with operators in the commercial waste management sector;
- 2500t or 2500m^3 equates to 50 tonnes per week; and
- the facility is provided by local government as a community service.

Other

Other exemptions apply to low risk waste storage activities, or where the primary purpose is not a waste collection service. Exemptions apply for temporarily storing:

- not more than 4000L or 4t of general waste or category 3 regulated waste at any one time;
- not more than 2000L or 2t of category 1 or 2 regulated waste at any one time (includes asbestos);
- not more than 4t or 500 EPUs, or end-of-life tyres or parts of tyres at any one time;
- chemically treated power poles;
- clinical waste consisting only of sharps in sharps containers that comply with AS 4031 or AS/NZ 4261 for a period of up to 28 calendar days;
- waste in accordance with an accredited product stewardship scheme or take-back scheme; or
- waste at a retail location or service premises where the waste is awaiting removal, such as at a motor vehicle workshop, tyre retailer, repair shop, battery retailer.

Attachment B: Preferred ERA framework threshold, AES and annual fee summary

Table 7: Proposed ERAs, thresholds and aggregate environmental scores (AES)

Proposed ERA	Threshold	AES	Annual fee
ERA 53 organic waste processing	(1) processing organic material by composting	37	$9,368.40
	(2) processing organic material by anaerobic digestion	24	$6,076.80
ERA 55 waste processing or treatment	(1a) mechanically processing or treating > 5000t yr general waste	21	$5,317.20
	(1b) mechanically processing or treating cat 3 regulated waste	24	$6,076.80
	(1c) mechanically processing or treating cat 2 regulated waste	31	$8,102.40
	(1d) mechanically processing or treating cat 1 regulated waste or contaminated soil	44	$11,140.80
	(2a) thermally processing or treating general waste	38	$9,621.60
	(2b) thermally processing or treating cat 3 regulated waste	40	$10,128.00
	(2c) thermally processing or treating cat 2 regulated waste	48	$12,153.60
	(2d) thermally processing or treating cat 1 regulated waste or contaminated soil	60	$15,192.00
	(3a) otherwise processing or treating general waste	28	$7,089.60
	(3b) otherwise processing or treating cat 3 regulated waste	30	$7,596.00
	(3c) otherwise processing or treating cat 2 regulated waste	38	$9,621.60
	(3d) otherwise processing or treating cat 1 regulated waste or contaminated soil	50	$12,660.00
ERA 57 waste transport	(1) transporting end-of-life tyres	2	$506.40
	(2) transporting regulated waste (cat 1, 2 or 3)	1	$253.20*
	(3) transporting general waste	1	$253.20
ERA 60 waste disposal	(1a) Waste disposal <50000t yr (1a)	82	$20,762.40
	(1b) Waste disposal >50000t but <100000t yr (1a)	112	$28,358.40
	(1c) Waste disposal >100000 but <200000t yr (1a)	129	$32,662.80
	(1d) Waste disposal >200000t yr (1a)	139	$35,194.80
	(2a) Waste disposal >50t but <2000t yr (1b)	21	$5,317.20
	(2b) Waste disposal >2000t but <5000t yr (1b)	31	$7,849.20
	(2c) Waste disposal >5000t but <10000t yr (1b)	39	$9,874.80
	(2d) Waste disposal >10000t but <20000t yr (1b)	50	$12,660.00
	(2e) Waste disposal >20000t but <50000t yr (1b)	70	$17,724.00
	(2f) Waste disposal >50000t but <100000t yr (1b)	82	$20,762.40
	(2g) Waste disposal >100000t but <200000t yr (1b)	90	$22,788.00
	(2h) Waste disposal >200000t yr (1b)	110	$27,852.00
	(3) Maintaining a waste disposal facility in post closure care	17	$4,304.40
ERA 62 resource recovery and transfer facility	(1) baling of clean source separated recyclables	9	$2,278.80
	(2a) sorting, dismantling or temporarily storing general waste	14	$3,544.80
	(2b) sorting, dismantling or temporarily storing cat 3 regulated waste	17	$4,304.40
	(2c) sorting, dismantling or temporarily storing cat 2 regulated waste	25	$6,330.00
	(2d) sorting, dismantling or temporarily storing cat 1 regulated waste	29	$7,342.80
	(3) sorting or temporarily storing end-of-life tyres	14	$3,544.80

*$253.20 per regulated waste transport vehicle registered with the department. Fee capped at $9,115.20 (equivalent of 36 vehicles).

Attachment C: Regulated waste transport annual fee changes

An annual fee of $253.20 will be payable for each regulated waste transport vehicle registered with the department. The maximum fee is capped at $9,115.20 (equivalent to 36 vehicles) after which additional vehicles can be registered without further increasing the annual fee. The annual fee for tyre transport is fixed at $506.40, irrespective of the number of vehicles in use.

Table 8 summarises the new vehicle based fees, comparative to the existing annual fee.

Table 8: ERA 57 regulated transport annual fee summary

Existing annual fee structure		Vehicle based annual fee structure		
ERA Threshold	Current annual fee	No. of vehicles	Proposed annual fee	Change in fee
57(1) Regulated waste transport – end-of-life tyres	$630.00	NA	$506.40	-$119.60
57(2a) Regulated waste transport 1 - 5 vehicles	$1,772.40	1	$253.20	-$1,468.20
		2	$506.40	-$1,223.50
		3	$759.60	-$978.80
		4	$1,012.80	-$734.10
		5	$1,266.00	-$489.40
57(2b) Regulated waste transport 5 - 36 vehicles	$5,317.20	6	$1,519.20	-$3,670.50
		7	$1,772.40	-$3,425.80
		8	$2,025.60	-$3,181.10
		9	$2,278.80	-$2,936.40
		10	$2,532.00	-$2,691.70
		11	$2,785.20	-$2,447.00
		12	$3,038.40	-$2,202.30
		13	$3,291.60	-$1,957.60
		14	$3,544.80	-$1,712.90
		15	$3,798.00	-$1,468.20
		16	$4,051.20	-$1,223.50
		17	$4,304.40	-$978.80
		18	$4,557.60	-$734.10
		19	$4,810.80	-$489.40
		20	$5,064.00	-$253.20
		21	$5,317.20	$0.00
		22	$5,570.40	$253.20
		23	$5,823.60	$489.40
		24	$6,076.80	$734.10
		25	$6,330.00	$978.80
		26	$6,583.20	$1,223.50
		27	$6,836.40	$1,468.20
		28	$7,089.60	$1,712.90
		29	$7,342.80	$1,957.60
		30	$7,596.00	$2,202.30
		31	$7,849.20	$2,447.00
		32	$8,102.40	$2,691.70
		33	$8,355.60	$2,936.40
		34	$8,608.80	$3,181.10
		35	$8,862.00	$3,425.80
57(2c) Regulated waste transport > 36 vehicles	$10,634.40	> 36	$9,115.20	-$1,468.20

Attachment D: New ERA threshold and category determination

The following tables summarise the new ERA, threshold and annual fee that will be applicable for each existing ERA category. Within each table:

- the left hand column shows the existing ERA threshold and annual fee; and
- the right hand column shows the new ERA threshold and annual fee.

In some instances the right hand columns will show more than one possible new ERA and/or threshold. This is because the new descriptors and thresholds do not align directly with the existing ERA descriptors/ thresholds and as a result all new possible ERA thresholds have been shown. Where the new ERA threshold is known the cells are shaded green. Where the new threshold cannot be determined and there is more than one option, the cells are shaded orange.

For example, existing operations that involve only general waste, will transition to a new ERA threshold for general waste. However where regulated waste is involved the classification of the regulated waste must be known in order to determine the new ERA threshold. This can be determined by either adopting a default waste category (refer to Attachment F) or by undertaking testing of the waste for hazard parameters (refer to Attachment G). For facilities receiving multiple wastes the ERA threshold required will be determined by the waste with the highest risk categorisation.

The document Regulated Waste Review Summary of Proposed Framework (https://www.ehp.qld.gov.au/waste/pdf/regulated-waste-review-summary.pdf) provides further information on the decision processes used to determine each waste category and a selection of working examples.

Where an operator holds an approval to undertake more than 1 ERA the annual fee will be determined by the ERA that carries the highest annual fee.

ERA 20 Metal recovery

Existing ERA 20 metal recovery activities will be regulated under either ERA 55 (waste processing) or ERA 62 (waste transfer and resource recovery). Metal recovery operations that undertake lower risk manual sorting and dismantling activities will transition to ERA 62 (waste recovery facility). Metal recovery operations that involve higher risk mechanical processing (such as operating a fragmentiser) will transition to ERA 55 (waste processing or treatment). The new ERA threshold in both instances is determined by the classification of the waste.

Existing ERA threshold	*AES*	*Annual Fee*
20-(1) Metal recovery <100t day	No score	$630.00
20-(2a) Metal recovery >100t day or >10000t yr	19	$4,810.80
20-(2b) Metal recovery >100t day or >10000t yr with fragmentiser	51	$12,913.20

New ERA threshold	*AES*	*Annual Fee*
62-(2a) Sorting, dismantling or temporarily storing general waste	14	$3,544.80
62-(2b) Sorting, dismantling or temporarily storing cat 3 regulated waste	17	$4,304.40
62-(2c) Sorting, dismantling or temporarily storing cat 2 regulated waste	25	$6,330.00
62-(2d) Sorting, dismantling or temporarily storing cat 1 regulated waste	29	$7,342.80
55-(1a) Mechanically processing or treating > 5000t yr general waste	21	$5,317.20
55-(1b) Mechanically processing or treating cat 3 regulated waste	24	$6,076.80
55-(1c) Mechanically processing or treating cat 2 regulated waste	32	$8,102.40
55-(1d) Mechanically processing or treating cat 1 regulated waste or contaminated soil	44	$11,140.80

ERA 33 Crushing, milling, grinding or screening

ERA 33 will now apply to the processing of non-waste material only (such as virgin rock or quarry material). Persons processing non-waste material only will remain regulated under this ERA. Where waste is being processed (such as green waste timber or concrete), an ERA 55(1a) approval will be required (see table 9). ERA 55 also permits processing of non-waste material, and holders of this ERA will not be required to hold an additional ERA 33 approval. Itinerant or mobile approvals may be issued for both ERA 33 and ERA 55 activities.

Existing ERA threshold	*AES*	*Annual Fee*
33-Crushing, milling, grinding or screening >5000t yr	No score	$630.00

New ERA threshold	*AES*	*Annual Fee*
33-Crushing, milling, grinding or screening >5000t yr (non-waste material)	9	$2,278.80
55-(1a) Mechanically processing or treating > 5000t yr general waste	21	$5,317.20

ERA 52 Battery recycling

Existing used lead acid battery (ULAB) dismantling operations will transition to ERA 62-(2c) waste transfer and resource recovery facility. ULABs have default waste categorisation of category 2 regulated waste.

Existing ERA threshold	*AES*	*Annual Fee*
52-Battery recycling	No score	$630.00

New ERA threshold	*AES*	*Annual Fee*
62-(2c) Sorting, dismantling or temporarily storing cat 2 regulated waste	25	$6,330.00

ERA 53 Composting and soil conditioner manufacturing

Existing composting and soil conditioner manufacturing activities will transition to a new ERA 53(1) processing of organic materials by composting threshold.

Existing ERA threshold	*AES*	*Annual Fee*
53-Composting & soil conditioner manufacturing >200t yr	18	$4,557.60

New ERA threshold	*AES*	*Annual Fee*
53-(1) Processing organic material by composting	37	$9,368.40

ERA 55 Regulated waste recycling or reprocessing

Existing ERA 55 approvals will transition to a new ERA 55 waste processing or treatment category. The applicable threshold will be determined by the process being undertaken and the classification of waste.

Existing ERA threshold	*AES*	*Annual Fee*
55-(1) Regulated waste recycling or reprocessing	9	$2,278.80
55-(2) Regulated waste recycling or reprocessing	85	$21,522.00

New ERA threshold	*AES*	*Annual Fee*
55-(1b) Mechanically processing or treating cat 3 regulated waste	24	$6,076.80
55-(1c) Mechanically processing or treating cat 2 regulated waste	32	$8,102.40
55-(1d) Mechanically processing or treating cat 1 regulated waste or contaminated soil	44	$11,140.80
55-(3b) Otherwise processing or treating cat 3 regulated waste	30	$7,596.00
55-(3c) Otherwise processing or treating cat 2 regulated waste	38	$9,621.60
55-(3d) Otherwise processing or treating cat 1 regulated waste or contaminated soil	50	$12,660.00

ERA 56 Regulated waste storage

Existing ERA 56 regulated waste storage approvals will be captured by new ERA 62 waste transfer and resource recovery. ERA 62 permits temporary storage of waste until is it removed from the site for recycling, processing, treatment or disposal.

Existing ERA threshold	*AES*	*Annual Fee*
56 Regulated waste storage	21	$5,317.20

New ERA threshold	*AES*	*Annual Fee*
62-(2b) Sorting, dismantling or temporarily storing cat 3 regulated waste	17	$4,304.40
62-(2c) Sorting, dismantling or temporarily storing cat 2 regulated waste	25	$6,330.00
62-(2d) Sorting, dismantling or temporarily storing cat 1 regulated waste	29	$7,342.80

An ERA 62 approval will not be required for the temporary storage of:

- not more than 2000L or 2t of category 1 or 2 regulated waste at any one time (includes asbestos);
- not more than 4000L or 4t of general waste or category 3 regulated waste at any one time;
- not more than 4t or 500 equivalent passenger tyre units;
- chemically treated power poles;
- clinical waste consisting only of sharps in sharps containers that comply with AS 4031 or AS/NZ 4261 for a period of up to 28 calendar days;
- waste in accordance with an accredited product stewardship scheme or take-back scheme; or
- waste at a retail location or service premises where the waste is awaiting removal.

ERA 57 Regulated waste transport

An annual fee of $253.20 will be payable for each regulated waste transport vehicle registered with the department. The maximum fee will be capped at 36 vehicles ($9,115.20), after which additional vehicles can be registered without further increasing the annual fee.

Transport of end-of-life tyres will attract a flat fee of $506.40, irrespective of the number of vehicles registered.

Operators transporting up to 175kg of non-friable asbestos, in a commercial capacity or otherwise, will no longer be required to hold an ERA 57 approval.

Existing ERA threshold	*AES*	*Annual Fee*
57-(1) Regulated waste transport – end of life tyres	No score	$630.00
57-(2a) Regulated waste transport 1 to 5 vehicles	7	$1,772.40
57-(2b) Regulated waste transport 6 to 35 vehicles	21	$5,317.20
57-(2c) Regulated waste transport >36 vehicles	42	$10,634.40

New ERA threshold	*AES*	*Annual Fee*
57-(1) Transporting end-of-life tyres	2	$506.40
57-(2) Transporting regulated waste (cat 1, 2 or 3)	1	$253.20*

*$253.20 per regulated waste transport vehicle registered with the department. Fee capped at $9,115.20 (equivalent of 36 vehicles).

ERA 58 Regulated waste treatment

Existing ERA 58 regulated waste treatment approvals will transition to a new ERA 55 waste processing or treatment approval. The new ERA threshold will be determined by the process being undertaken and the classification of waste.

Existing ERA threshold	*AES*	*Annual Fee*
58-Regulated waste treatment	90	$22,788.00

New ERA threshold	*AES*	*Annual Fee*
55-(1b) Mechanically processing or treating cat 3 regulated waste	24	$6,076.80

55-(1c) Mechanically processing or treating cat 2 regulated waste	32	$8,102.40
55-(1d) Mechanically processing or treating cat 1 regulated waste or contaminated soil	44	$11,140.80
55-(3b) Otherwise processing or treating cat 3 regulated waste	30	$7,596.00
55-(3c) Otherwise processing or treating cat 2 regulated waste	38	$9,621.60
55-(3d) Otherwise processing or treating cat 1 regulated waste or contaminated soil	50	$12,660.00

ERA 59 Tyre recycling

Existing ERA 59 tyre recycling approvals will transition to a new ERA 55 waste processing or treatment category. Tyres have a default waste categorisation of category 3 regulated waste and the table below assumes that recycling is being undertaken using shredding and grinding (mechanical) processes only.

Existing ERA threshold	*AES*	*Annual Fee*
59-Tyre recycling	No score	$630.00

New ERA threshold	*AES*	*Annual Fee*
55-(1b) Mechanically processing or treating cat 3 regulated waste	24	$6,076.80

ERA 60 Waste disposal

ERA 60 waste disposal approvals will continue to be regulated under the same ERA and threshold.

Existing ERA threshold	*AES*	*Annual Fee*
60-(1a) Waste disposal <50000t yr	50	$12,660.00
60-(1b) Waste disposal >50000t but <100000t yr	82	$20,762.40
60-(1c) Waste disposal >100000 but <200000t yr	100	$25,320.00
60-(1d) Waste disposal >200000t yr	110	$27,852.00
60-(2a) Waste disposal >50t but <2000t yr	13	$3,291.60
60-(2b) Waste disposal >2000t but <5000t yr	20	$5,064.00
60-(2c) Waste disposal >5000t but <10000t yr	29	$7,342.80
60-(2d) Waste disposal >10000t but <20000t yr	41	$10,381.20
60-(2e) Waste disposal >20000t but <50000t yr	53	$13,419.60
60-(2f) Waste disposal >50000t but <100000t yr	58	$14,685.60
60-(2g) Waste disposal >100000t but 200000t yr	73	$18,483.60
60-(2h) Waste disposal >200000t yr	96	$24,307.20

New ERA threshold	*AES*	*Annual Fee*
60-(1a) Waste disposal <50000t yr	82	$20,762.40
60-(1b) Waste disposal >50000t but <100000t yr	112	$28,358.40
60-(1c) Waste disposal >100000 but <200000t yr	129	$32,662.80
60-(1d) Waste disposal >200000t yr	139	$35,194.80
60-(2a) Waste disposal >50t but <2000t yr	21	$5,317.20
60-(2b) Waste disposal >2000t but <5000t yr	31	$7,849.20
60-(2c) Waste disposal >5000t but <10000t yr	39	$9,874.80
60-(2d) Waste disposal >10000t but <20000t yr	50	$12,660.00
60-(2e) Waste disposal >20000t but <50000t yr	70	$17,724.00
60-(2f) Waste disposal >50000t but <100000t yr	82	$20,762.40
60-(2g) Waste disposal >100000t but 200000t yr	90	$22,788.00
60-(2h) Waste disposal >200000t yr	110	$27,852.00

ERA 61 Waste incineration and thermal treatment

Existing ERA 61 waste incineration and thermal treatment approval holders will transition to new ERA 55 waste processing or treatment. The new ERA threshold will be determined by the process being undertaken and the classification of waste.

Existing ERA threshold	*AES*	*Annual Fee*	*New ERA threshold*	*AES*	*Annual Fee*
61-(1) Waste incineration & thermal treatment (green waste, paper, cardboard)	No score	$630.00	Not regulated. Local laws and Queensland Fire and Emergency Service provisions considered sufficient to manage small scale burning of these waste types. However where burning or incineration is of a scale that cannot be authorised through these provisions ERA 55(2a) may be required.		
61-(2a) Waste incineration & thermal treatment <5000t yr general waste	18	$4,557.60	55-(2a) Thermally processing or treating - general waste	38	$9,621.60
61-(2b) Waste incineration & thermal treatment >5000t yr general waste	30	$7,596.00			
61-(3a) Waste incineration & thermal treatment - clinical	51	$12,913.20	55-(2d) Thermally processing or treating cat 1 regulated waste or contaminated soil	60	$15,192.00
			55-(3d) Otherwise processing or treating cat 1 regulated waste or contaminated soil (includes autoclaving)	50	$12,660.00
61-(3b) Waste incineration & thermal treatment – regulated waste	41	$10,381.20	55-(2b) Thermally processing or treating cat 3 regulated waste	40	$10,128.00
			55-(2c) Thermally processing or treating cat 2 regulated waste	48	$12,153.60
			55-(2d) Thermally processing or treating cat 1 regulated waste or contaminated soil	60	$15,192.00

ERA 62 Waste transfer station operation

Existing ERA 62 waste transfer station operations will be regulated under either ERA 55 (waste processing or treatment) or ERA 62 (waste transfer and resource recovery). Waste transfer station operations that undertake lower risk manual sorting and dismantling activities will transition to new ERA 62 (waste transfer and resource recovery). In instances where further (higher risk) processing is undertaken, such as using mechanical sorting or processing equipment, an ERA 55 (waste processing or treatment) approval will be required. Up to 5000 tonnes per year of general waste may be mechanically processed at an ERA 62 approval holding facility without requiring an additional ERA 55 approval.

Existing ERA threshold	*AES*	*Annual Fee*	*New ERA threshold*	*AES*	*Annual Fee*
62-Waste transfer station operation >30t or 30m^3 day	31	$7,849.20	62-(1) Baling of clean source separated recyclables	9	$2,278.80
			62-(2a) Sorting, dismantling or temporarily storing general waste	14	$3,544.80
			55-(1a) Mechanically processing or treating > 5000t yr general waste	21	$5,317.20

Attachment E: State government impacts – number of activities and annual fee estimate

Table 9: State government annual fee revenue estimates

New ERA and threshold	*Annual Fee*	*Scenario 1*		*Scenario 2*	
		No. of approvals	*Estimated revenue*	*No. of approvals*	*Estimated revenue*
33-Crushing, milling, grinding or screening >5000t yr	$2,278.80	121	$275,734.80	73	$166,352.40
53-(1) Processing organic material by composting	$9,368.40	78	$730,735.20	78	$730,735.20
53-(2) Processing organic material by anaerobic digestion	$6,076.80				
55-(1a) Mechanically processing or treating > 5000t yr general waste	$6,583.20	3	$15,951.60	69	$366,886.80
55-(1b) Mechanically processing or treating cat 3 regulated waste	$7,342.80	96	$583,372.80	30	$182,304.00
55-(1c) Mechanically processing or treating cat 2 regulated waste	$9,368.40			39	$315,993.60
55-(1d) Mechanically processing or treating cat 1 regulated waste or contaminated soil	$12,406.80			29	$323,083.20
55-(2a) Thermally processing or treating - general waste	$13,419.60	7	$67,351.20	7	$67,351.20
55-(2b) Thermally processing or treating cat 3 regulated waste	$14,938.80	6	$60,768.00	1	$10,128.00
55-(2c) Thermally processing or treating cat 2 regulated waste	$15,951.60			3	$36,460.80
55-(2d) Thermally processing or treating cat 1 regulated waste or contaminated soil	$18,990.00			2	$30,384.00
55-(3a) Otherwise processing or treating - general waste	$10,887.60				
55-(3b) Otherwise processing or treating cat 3 regulated waste	$12,406.80				
55-(3c) Otherwise processing or treating cat 2 regulated waste	$13,419.60				
55-(3d) Otherwise processing or treating cat 1 regulated waste or contaminated soil	$16,458.00	12	$197,496.00	12	$197,496.00
57-(1) Transporting end-of-life tyres	$506.40	48	$24,307.20	48	$24,307.20
57-(2) Transporting regulated waste (cat 1, 2 or 3)	$253.20	812	$1,125,474.00	812	$1,125,474.00
57-(3) Transporting general waste	$253.20				
60-(1a) Waste disposal <50000t yr	$20,762.40	53	$1,100,407.20	53	$1,100,407.20
60-(1b) Waste disposal >50000t but <100000t yr	$28,358.40	10	$283,584.00	10	$283,584.00
60-(1c) Waste disposal >100000 but <200000t yr	$32,662.80	5	$163,314.00	5	$163,314.00
60-(1d) Waste disposal >200000t yr	$35,194.80	37	$1,302,207.60	37	$1,302,207.60
60-(2a) Waste disposal >50t but <2000t yr	$5,317.20	72	$382,838.40	72	$382,838.40
60-(2b) Waste disposal >2000t but <5000t yr	$7,849.20	34	$266,872.80	34	$266,872.80
60-(2c) Waste disposal >5000t but <10000t yr	$9,874.80	22	$217,245.60	22	$217,245.60
60-(2d) Waste disposal >10000t but <20000t yr	$12,660.00	17	$215,220.00	17	$215,220.00

New ERA and threshold	*Annual Fee*	*Scenario 1*		*Scenario 2*	
		No. of approvals	*Estimated revenue*	*No. of approvals*	*Estimated revenue*
60-(2e) Waste disposal >20000t but <50000t yr	$17,724.00	15	$265,860.00	15	$265,860.00
60-(2f) Waste disposal >50000t but <100000t yr	$20,762.40	18	$373,723.20	18	$373,723.20
60-(2g) Waste disposal >100000t but 200000t yr	$22,788.00	7	$159,516.00	7	$159,516.00
60-(2h) Waste disposal >200000t yr	$27,852.00	6	$167,112.00	6	$167,112.00
60-(3) Maintaining a waste disposal facility in post closure care	$4,304.40				
62-(1) Baling of clean source separated recyclables	$2,278.80				
62-(2a) Sorting, dismantling or temporarily storing - general waste	$3,544.80	255	$336,756.00	179	$634,519.20
62-(2b) Sorting, dismantling or temporarily storing cat 3 regulated waste	$4,304.40	121	$520,832.40	40	$172,176.00
62-(2c) Sorting, dismantling or temporarily storing cat 2 regulated waste	$6,330.00	2	$12,660.00	80	$506,400.00
62-(2d) Sorting, dismantling or temporarily storing cat 1 regulated waste	$7,342.80			59	$433,225.20
62-(3) Sorting or temporarily storing end-of-life tyres	$3,544.80				
	TOTAL	**1857**	**$9,370,932.00**	**1857**	**$10,175,601.60**

Attachment F: Default waste categorisation table

Table 10: Default waste categorisation table

Waste (tracking) code	Current regulated waste description	Primary hazard	Hazard description	Default waste category
D130	Arsenic and arsenic compounds	H11	Toxic (delayed or chronic)	1
D160	Beryllium and beryllium compounds	H11	Toxic (delayed or chronic)	1
D150	Cadmium and cadmium compounds	H11	Toxic (delayed or chronic)	1
T100	Chemical waste arising from research and development or teaching activity, including new or unidentified material and material whose effects on human health or the environment are not known	H6.1	Poisonous (acute)	1
D350	Chlorates	H1	Explosive	1
D140	Chromium compounds (hexavalent and trivalent)	H11	Toxic (delayed or chronic)	1
R100	Clinical and related wastes	H6.2	Infectious substances	1
A130	Cyanides (inorganic)	H6.1	Poisonous (acute)	1
N190	Filter cake, other than filter cake waste generated from the treatment of raw water for the supply of drinking water	H11	Toxic (delayed or chronic)	1
N150	Fly ash	H11	Toxic (delayed or chronic)	1
G150	Halogenated organic solvents	H3	Flammable liquids	1
M100	Material containing polychlorinated biphenyls (PCBs), polychlorinated napthalenes (PCNs), polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)	H12	Ecotoxic	1
D100	Metal carbonyls	H6.1	Poisonous (acute)	1
H110	Organic phosphorus compounds	H11	Toxic (delayed or chronic)	1
G110	Organic solvents other than halogenated solvents, including, for example, ethanol	H3	Flammable liquids	1
M160	Organohalogen compounds, other than another substance stated in this schedule	H12	Ecotoxic	1
-	Oxidising agents	H5.1	Oxidizing	1
D340	Perchlorates	H1	Explosive	1
R120	Pharmaceuticals, drugs and medicines	H6.1	Poisonous (acute)	1
M170	Polychlorinated dibenzo-furan (any congener)	H11	Toxic (delayed or chronic)	1
M180	Polychlorinated dibenzo-p-dioxin (any congener)	H11	Toxic (delayed or chronic)	1
N205	Residues from industrial waste treatment or disposal operations	H11	Toxic (delayed or chronic)	1
J160	Tarry residues arising from refining, distillation or any pyrolytic treatment	H11	Toxic (delayed or chronic)	1
A110	Waste from a heat treatment or tempering operation that uses cyanides	H11	Toxic (delayed or chronic)	1
H100	Waste from manufacture, formulation and use of the following: a) biocides or phytopharmaceuticals	H11	Toxic (delayed or chronic)	1
G160	Waste from manufacture, formulation and use of the following: c) organic solvents	H3	Flammable liquids	1

Waste (tracking) code	Current regulated waste description	Primary hazard	Hazard description	Default waste category
F110	Waste from manufacture, formulation and use of the following: e) resins, latex, plasticisers, glues or other adhesives	H11	Toxic (delayed or chronic)	1
H170	Waste from manufacture, formulation and use of the following: f) wood-preserving chemicals	H11	Toxic (delayed or chronic)	1
R140	Waste from the production and preparation of pharmaceutical products	H6.1	Poisonous (acute)	1
E120	Waste of an explosive nature other than explosives within the meaning of the Explosives Act 1999	H1	Explosive	1
B100	Acidic solutions and acids in solid form	H8	Corrosives	2
N220	Asbestos	H11	Toxic (delayed or chronic)	2
C100	Basic (alkaline) solutions and bases (alkalis) in solid form	H8	Corrosives	2
D310	Boron compounds	H11	Toxic (delayed or chronic)	2
D190	Copper compounds	H12	Ecotoxic	2
M210	Cyanides (organic)	H6.1	Poisonous (acute)	2
G100	Ethers	H3	Flammable liquids	2
K110	Grease trap waste	Other	Amenity based	2
M260	Highly odorous organic chemicals including mercaptans and acrylates	Other	Strong offensive odours at low substance concentrations	2
D110	Inorganic fluorine compounds, other than calcium fluoride	H12	Ecotoxic	2
D330	Inorganic sulfides	H8	Corrosives	2
M220	Isocyanate compounds	H12	Ecotoxic	2
D220	Lead and lead compounds including lead-acid batteries	H11	Toxic (delayed or chronic)	2
D120	Mercury and mercury compounds	H11	Toxic (delayed or chronic)	2
J100	Mineral oils	H3	Flammable liquids	2
M150	Phenols, phenol compounds including chlorophenols	H6.1	Poisonous (acute)	2
D240	Selenium and selenium compounds	H12	Ecotoxic	2
M250	Surface active agents (surfactants), containing principally organic constituents, whether or not also containing metals and inorganic materials	H12	Ecotoxic	2
K140	Tannery wastes, including leather dust, ash, sludges and flours	H11	Toxic (delayed or chronic)	2
D250	Tellurium and tellurium compounds	H11	Toxic (delayed or chronic)	2
M230	Triethylamine catalysts for setting foundry sands	H11	Toxic (delayed or chronic)	2
D270	Vanadium compounds	H11	Toxic (delayed or chronic)	2
E100	Waste containing peroxides other than hydrogen peroxide	H1	Explosive	2
F100	Waste from manufacture, formulation and use of the following: b) inks, dyes, pigments, paints, lacquers or varnish	H3	Flammable liquids	2

Waste (tracking) code	Current regulated waste description	Primary hazard	Hazard description	Default waste category
T120	Waste from manufacture, formulation and use of the following: d) photographic chemicals or processing materials	H8	Corrosives	2
K190	Wool scouring wastes	Other	Odour amenity	2
D230	Zinc compounds	H12	Ecotoxic	2
K100	Animal effluent and residues, including abattoir effluent and poultry and fish processing wastes)	Other	Amenity based	3
D170	Antimony and antimony compounds	H11	Toxic (delayed or chronic)	3
D290	Barium compounds, other than barium sulfate	H11	Toxic (delayed or chronic)	3
-	Food processing waste	Other	Amenity based	3
D210	Nickel compounds	H11	Toxic (delayed or chronic)	3
D300	Non-toxic salts, for example, saline effluent	H13	Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above	3
D360	Phosphorus compounds, other than mineral phosphates	H11	Toxic (delayed or chronic)	3
K130	Sewage sludge and residues, including nightsoil and septic tank sludge	Other	Odour amenity	3
D180	Thallium and thallium compounds	H11	Toxic (delayed or chronic)	3
T140	Tyres	Other	Fire (with toxic by-products) and mosquito (health) risk	3
-	Vegetable oils	H3	Flammable liquids	3

Attachment G: Hazard parameter waste categorisation table

Table 11: Hazard parameters and waste categories table

Hazard parameters	Waste categories											
	Category 1			**Category 2**			**Category 3**			**Category NR**		
	T (mg/kg)		**L** (mg/L)	**T** (mg/kg)		**L** (mg/L)	**T** (mg/kg)		**L** (mg/L)	**T** (mg/kg)		**L** (mg/L)
Inorganic species												
Arsenic	> 2,000	or	> 2.8	2,000 - 500	or	2.8 - 0.7	< 500	&	0.7 - 0.35	< 500	&	< 0.35
Barium	> 25,000	or	> 280	25,000 – 6,250	or	280 - 70	< 6,250	&	70 - 35	< 6,250	&	< 35
Beryllium	> 400	or	> 4	400 - 100	or	4 - 1	< 100	&	1 - 0.5	< 100	&	< 0.5
Cadmium	> 400	or	> 0.8	400 - 100	or	0.8 - 0.2	< 100	&	0.2 - 0.1	< 100	&	< 0.1
Chromium (VI)	> 2,000	or	> 20	2,000 - 500	or	20 - 5	< 500	&	5 - 2.5	< 500	&	< 2.5
Copper	> 20,000	or	> 800	20,000 – 5,000	or	800 - 200	< 5,000	&	200 - 100	< 5,000	&	< 100
Lead	> 6,000	or	> 4	6,000 – 1,500	or	4 - 1	< 1,500	&	1 - 0.5	< 1,500	&	< 0.5
Mercury	> 300	or	> 0.4	300 - 75	or	0.4 - 0.1	< 75	&	0.1 - 0.05	< 75	&	< 0.05
Molybdenum	> 4,000	or	> 20	4,000 – 1,000	or	20 - 5	< 1,000	&	5 - 2.5	< 1,000	&	< 2.5
Nickel	> 12,000	or	> 8	12,000 – 3,000	or	8 - 2	< 3,000	&	2 - 1	< 3,000	&	< 1
Selenium	> 200	or	> 4	200 - 50	or	4 - 1	< 50	&	1 - 0.5	< 50	&	< 0.5
Silver	> 10	or	> 0.4	10 - 2.5	or	0.4 - 0.1	< 2.5	or	0.1 - 0.05	< 2.5	&	< 0.05
Zinc	> 140,000	or	> 1,200	140,000 – 35,000	or	1,200 - 300	< 35,000	or	300 - 150	< 35,000	&	< 150
Anions												
Cyanide[2]	> 10,000	or	> 14	10,000 – 2,500	or	14 - 3.5	< 2,500	&	3.5 - 1.75	< 2,500	&	< 1.75
Fluoride	> 40,000	or	> 600	40,000 – 10,000	or	600 - 150	< 10,000	&	150 - 75	< 10,000	&	< 75
Organic species												
Petroleum hydrocarbons												
C6-C9 petroleum hydrocarbons	> 2,600		-	2,600 - 650		-	650 - 325		-	< 325		-
C10-C36 petroleum hydrocarbons	> 40,000		-	40,000 – 10,000		-	10,000 – 5,000		-	< 5,000		-

Hazard parameters	Waste categories											
	Category 1			Category 2			Category 3			Category NR		
	T (mg/kg)		L (mg/L)	T (mg/kg)		L (mg/L)	T (mg/kg)		L (mg/L)	T (mg/kg)		L (mg/L)
Polycyclic Aromatic Hydrocarbons												
Benzo(a)pyrene	> 20	or	> 0.004	20 - 5	or	0.004 - 0.001	< 5	&	0.001 - 0.0005	< 5	&	< 0.0005
Polycyclic aromatic hydrocarbons (total)[3]	> 400		-	400 - 100		-	100 - 50		-	< 50		-
Monocyclic Aromatic Hydrocarbons												
Benzene	> 16	or	> 0.4	16 - 4	or	0.4 - 0.1	< 4	&	0.1 - 0.05	< 4	&	< 0.05
Toluene	> 12,800	or	> 320	12,800 – 3,200	or	320 - 80	< 3,200	or	80 - 40	< 3,200	&	< 40
Ethylbenzene	> 4,800	or	> 120	4,800 – 1,200	or	120 - 30	< 1,200	&	30 - 15	< 1,200	&	< 15
Xylenes (total)	> 9,600	or	> 240	9,600 – 2,400	or	240 - 60	< 2,400	or	60 - 30	< 2,400	&	< 30
Styrene (vinyl benzene)	> 480	or	> 12	480 - 120	or	12 - 3	< 120	or	3 - 1.5	< 120	&	< 1.5
Chlorinated hydrocarbons												
Carbon tetrachloride	> 48	or	> 1.2	48 - 12	or	1.2 - 0.3	< 12	&	0.3 - 0.15	< 12	&	< 0.15
Chlorobenzene	> 4,800	or	> 120	4,800 – 1,200	or	120 - 30	< 1,200	&	30 - 15	< 1,200	&	< 15
Chloroform	> 960	or	> 24	960 - 240	or	24 - 6	< 240	&	6 - 3	< 240	&	< 3
1,2- Dichlorobenzene	> 24,000	or	> 600	24,000 – 6,000	or	600 - 150	< 6,000	&	150 - 75	< 6,000	&	< 75
1,4- Dichlorobenzene	> 640	or	> 16	640 - 160	or	16 - 4	< 160	&	4 - 2	< 160	&	< 2
1,2- Dichloroethane	> 48	or	> 1.2	48 - 12	or	1.2 - 0.3	< 12	&	0.3 - 0.15	< 12	&	< 0.15
1,1-Dichloro- ethylene	> 480	or	> 12	480 - 120	or	12 - 3	< 120	&	3 - 1.5	< 120	&	< 1.5
Dichloromethane	> 64	or	> 1.6	64 - 16	or	1.6 - 0.4	< 16	&	0.4 - 0.2	< 16	&	< 0.2
1,1,1,2- Tetrachloro- ethane	> 1,600	or	> 40	1,600 - 400	or	40 - 10	< 400	or	10 - 5	< 400	&	< 5
1,1,2,2- Tetrachloro- ethane	> 210	or	> 5.2	210 - 52.5	or	5.2 - 1.3	< 52.5	or	1.3 - 0.65	< 52.5	&	< 0.65
Tetrachloro- ethylene	> 800	or	> 20	800 - 200	or	20 - 5	< 200	or	5 - 2.5	< 200	&	< 2.5
1,1,1- Trichloroethane	> 4,800	or	> 120	4,800 – 1,200	or	120 - 30	< 1,200	or	30 - 15	< 1,200	&	< 15
1,1,2- Trichloroethane	> 190	or	> 4.8	190 - 47.5	or	4.8 - 1.2	< 47.5	or	1.2 - 0.6	< 47.5	&	< 0.6

Hazard parameters	Waste categories											
	Category 1			Category 2			Category 3			Category NR		
	T (mg/kg)		L (mg/L)	T (mg/kg)		L (mg/L)	T (mg/kg)		L (mg/L)	T (mg/kg)		L (mg/L)
Trichloroethylene	> 80	or	> 2	80 - 20	or	2 - 0.5	< 20	or	0.5 - 0.25	< 20	&	< 0.25
Vinyl chloride	> 4.8	or	> 0.12	4.8 - 1.2	or	0.12 - 0.03	< 1.2	or	0.03 - 0.015	< 1.2	&	< 0.015
Phenols												
2,4,5- Trichlorophenol	> 64,000	or	> 1,600	64,000 – 16,000	or	1,600 - 400	<16,000	or	400 - 200	< 16,000	&	< 200
2,4,6- Trichlorophenol	> 320	or	> 8	320 - 80	or	8 - 2	< 80	or	2 - 1	< 80	&	< 1
Cresol (total)	> 32,000	or	> 800	32,000 – 8,000	or	800 - 200	< 8,000	&	200 - 100	< 8,000	&	< 100
Phenol total, (non- halogenated)[4]	> 2,200	or	> 56	2,200 - 550	or	56 - 14	< 550	&	14 - 7	< 550	&	< 7
Nitroaromatics and ketones												
2,4-Dinitrotoluene	> 21	or	> 0.52	21 - 5.25	or	0.52 - 0.13	< 5.25	&	0.13 - 0.065	< 5.25	&	< 0.065
Nitrobenzene	> 320	or	> 8	320 - 80	or	8 - 2	< 80	&	2 - 1	< 80	&	< 1
Methyl ethyl ketone	> 32,000	or	> 800	32,000 – 8,000	or	800 - 200	< 8,000	&	200 - 100	< 8,000	&	< 100
Specific persistent organic pollutants (POP)												
2,4-D	> 480	or	> 12	480 - 120	or	12 - 3	< 120	&	3 - 1.5	< 120	&	< 1.5
Aldrin + Dieldrin	> 4.8	or	> 0.12	4.8 - 1.2	or	0.12 - 0.03	< 1.2	&	0.03 - 0.015	< 1.2	&	< 0.015
Organochlorine pesticides[5]	> 50	0	-	< 50	0	2	< 50	&	2 - 1	< 50	&	< 1
Organophosphate pesticides[6]	> 30	or	> 0.8	30 - 7.5	or	0.8 - 0.4	< 7.5	&	0.4 - 0.2	< 7.5	&	< 0.2
Polychlorinated biphenyls	> 50	or	> 0.002	50 - 20	or	0.002 - 0.001	20 - 2	&	<0.001	< 2	&	< 0.001
Any other ratified Stockholm – POP[7]	> 50		-	-		-	-		-	< 50		-

PROPERTIES				
	Category 1	**Category 2**	**Category 3**	**Category (NR)**
pH	≤ 2.0 or ≥12.5	2 - 4 or 10.5 - 12.5	4 - 6	6 - 10.5
Electrical conductivity (µS/cm)	N/A	N/A	≥15,000	<15,000
Biochemical oxygen demand	N/A	N/A	≥20	<20
Flash point (^{0}C)	≤60.5	N/A	N/A	>60.5
Peroxides (other than hydrogen peroxide) above 1% (v/v)	Present	N/A	N/A	Not present
WASTES FOR WHICH TESTING IS NOT RELEVANT				
	Category 1	**Category 2**	**Category 3**	**Category (NR)**
Chemical waste arising from research and development or teaching activity, including new or unidentified material and material whose effects on human health or the environment are not known	N/A	Present	N/A	Not present
Clinical and related waste[8]	Present	N/A	N/A	Not present
Oxidising agents	Present	N/A	N/A	Not present
Pharmaceuticals, drugs and medicines	Present	N/A	N/A	Not present
Tyres	N/A	N/A	Present	Not present
Waste from the production and preparation of pharmaceutical products	Present	N/A	N/A	Not present
Waste of an explosive nature other than explosives within the meaning of the *Explosives Act 1999*	Present	N/A	N/A	Not present

Notes:

1. mg/kg is expressed on a dry weight basis.

2. Cyanide means:

a) for total concentration analysis (T, mg/kg), Total Cyanide.

b) for leachable concentration analysis (L, mg/L) Cyanide Amenable to Chlorination. Note that the ASLP/ TCLP method is not appropriate for measuring cyanide.

3. Total sum of naphthalene, acenaphthylene, acenaphthene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluorene, fluoranthene, indeno(1,2,3-c,d)pyrene, phenanthrene and pyrene.

4. Total sum of phenol, 2-methylphenol (o-cresol), 3-methylphenol (m-cresol), 4-methylphenol (p-cresol), 2,4-dimethylphenol, 2.4-dinitrophenol, 2- methyl-4,6-dinitrophenol, 2-nitrophenol, 4-nitrophenol, 2-cyclohexyl-4,6-dinitrophenol and dinoseb.

5. Means laboratory analysis suite of organochlorine pesticides that typically include: Total sum of aldrin, hexachlorobenzene, alpha BHC, beta BHC, gamma BHC (lindane), delta BHC, chlordane, DDT, DDD, DDE, dieldrin, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, methoxychlor and endosulfan (includes endosulfan I, endosulfan II and endosulfan sulphate).

6. Means the list of organophosphate chemicals approved for use in Australia as shown in Appendix 2 of: Organophosphate Pesticides – Hazardous Chemicals Requiring Health Monitoring, Safe Work Australia, 2013 (http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/801/Organophosphate-Pesticides.pdf)

7. Persistent Organic Pollutant, as listed in the Stockholm Convention (http://chm.pops.int/TheConvention/Overview/TextoftheConvention/tabid/2232/Default.aspx) and ratified by the Australian Government (more information at: http://www.environment.gov.au/topics/environment-protection/chemicals-management/pops)
8. Clinical or related waste means wastes arising from medical, nursing, dental, veterinary, laboratory, pharmaceutical, podiatry, tattooing, body piercing, brothels, emergency services, blood banks, mortuary practices and other similar practices, and wastes generated in healthcare facilities or other facilities during the investigation or treatment of patients or research projects, which have the potential to cause disease, injury, or public offence, and includes: sharps, clinical waste, human tissue or body parts, cytotoxic waste, pharmaceutical waste and chemical waste.