



Director General
Department of Water and Environmental Regulation
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By email only: wastereform@dwer.wa.gov.au

Dear Sir,

Waste not, want not: valuing waste as a resource (Issues paper)

Please find attached Eclipse Soils' comments on the above.

Yours faithfully

A handwritten signature in blue ink, appearing to read "Troy Buswell", is written over a blue horizontal line.

Troy Buswell
Chief Executive officer
30 August 2019

Eclipse Soils' comments on DWER's: *Waste not, want not: valuing waste as a resource (Issues paper)*

Summary

- (i) Materials that are re-used or recycled as a resource should not be the subject of the landfill levy.
- (ii) Materials that are dumped or discarded into a landfill (traditional tip) as having no immediate use should be levied.
- (iii) The primary test for differentiating between waste and a resource should be whether the materials are paid for or not: rather than whether they have been "substantially transformed" or not.
- (iv) Statutory definitions should be given to a number of key terms.
- (v) Sequential land use should be actively supported by DWER and the Waste Authority.
- (vi) The standards for re-using or recycling materials as fill should be those of the *Contaminated Sites Act 2003*.
- (vii) There should not be a 'case-by-case' system run by DWER to determine whether or not materials meet re-use/recycle quality criteria.

General principles

1. The Government parties (including the Minister, Treasury and the Department) must acknowledge that increasing re-use and recycling through the diversion away from the disposal of waste to landfill (traditional tips) will reduce revenue derived from the landfill levy. This is very likely even if the landfill levy keeps getting raised from its current \$105/m³.
2. If the landfill levy is 100% effective in diverting waste, then levy revenue should shrink to \$0.
3. Eclipse Soils contends that the intent of the landfill levy has been clear since its legislative introduction in 1997 and its legislative updating in 2007: that is in summary, if waste is used productively as a resource and not disposed of in a landfill (traditional tip) levy is not due and payable.
4. The "waste hierarchy" is contained in s.5 'Objects of this Act' of the *Waste Avoidance and Resource Recovery Act 2007*¹ and in Figure 3 on page 13 of the *Waste Avoidance and Resource Recovery Strategy 2030*². These quite clearly in both a statutory and policy sense, establish the order of preference for managing waste. The Government through its agents (Minister, Department and Waste Authority) should make legislative reforms, policy and governance/enforcement decisions that properly reflect and appropriately support this order of importance. It is not clear that this has always been so.
5. "Waste is the antithesis of a product in ordinary parlance". Blue J, SA Court of Appeal³.
6. "There is a simple test for determining whether something is a resource (something valuable) or just garbage (something you want to dispose of at the lowest possible cost, including costs to the environment). If someone will pay you for the item, it's a resource. Or, if you can use

the item to make something else people want, and do it at lower price or higher quality than you could without that item, then the item is also a resource. But if you have to pay someone to take the item away, or if other things made with that item cost more or have lower quality, then the item is garbage". Michael Munger, Professor of Political Science, Duke University, USA.

Definitions

7. To give clarity to both legislative reforms and to commercial activities there needs to be clear definitions of a number of terms including:
- a. Re-use (e.g. recovering value from a discarded resource in its original state without reprocessing or remanufacture⁴)
 - b. Recycle (e.g. a set of processes (including biological) that converts solid waste into useful materials or products, net of contaminants/residuals disposed⁴)
 - c. Substantial transformation. Beech J at [613] (and [627]) in *Eclipse Resources Pty Ltd v The State of Western Australia* [No 4] [2016] WASC 62 said:

“In this statutory setting, I think the starting point is that if material is waste when received and accepted for burial, in determining whether it is 'waste disposed of to landfill', it continues to have the character of waste at least unless it has been substantially transformed between when it was received and when it is (allegedly) disposed of to landfill “.

However, Beech J went no further to describe substantial transformation.

Both Beech J and the WA Court of Appeal ([2017] WASCA 90) held that neither remediation of acid sulfate soils (chemical) nor bio-remediation (biological) constituted “substantially transforming” waste. These decisions leave only some sort of physical transformation as being able to change the characterisation of a waste to a resource. Clearly this is a matter that needs addressing.

It should be noted that DWER has said previously with respect to the Gateway WA project: “Gateway WA requires in excess of 2,000,000 tonnes of material for the project...Rather than solely sourcing virgin materials from a quarry, Gateway WA has identified that they can reclaim ASS, a material that would otherwise be destined for landfill and treat it to a standard that makes it suitable for use as fill. The standard of fill will meet the same standards as if quarry material were used. Reuse of treated Acid Sulfate Soil is DER’s preferred position. Treated ASS is usually considered a resource, not a waste. Disposal at a landfill should only be used as a last resort.”⁹

While Eclipse Soils may agree with this sentiment it is arguable that the Beech J judgement means that levy should be paid on the reused fill.

- d. Landfill. The filling of land (verb) differs from landfill (noun). The landfill levy applies to “disposal premises” which is a wider concept than a “rubbish tip”. Landfill (noun) needs defining (e.g. [a premises that is used for the primary purpose for the end disposal of waste for which no other use is envisaged at the time of disposal, and the purpose of which is so recognised relevantly as a land use in statutory planning instruments])

Sequential land use

- 8. Sequential land use is a national policy⁵ and a State government policy (WAPC Statement of Planning Policy 2.4 Basic Raw Materials)⁶. It is also supported by industry involved in supplying basic raw materials to the Perth metropolitan residential, commercial and industrial market⁷.
- 9. The previous State Government purported to support it from a planning perspective. See Hansard Legislative Council Wednesday 21 May 2010 p. 957 Question 83 from Hon P Edman to the Minister representing the Minister for Planning⁸. In the Legislative Council debate on the *Waste Avoidance and Resource Recovery Amendment (Validation) Bill 2014*, Hon Sally Talbot MLC said: “Look at how the people in the Department of Planning view this issue. If we say “sequential landfill (sic)” to anyone in that department, we get the big two thumbs up sign because they love it. This is what we do when we are responsibly planning, particularly for inner city infill. It is what we do when we finally get to the point of acknowledging that our resource such as limestone on the coastal plain is not unlimited... Departments are clearly at odds with each (other).”¹⁰
- 10. Sequential land use involves in general summary:
 - a. mining a strategic basic raw material (limestone, sand) such that a void is or has been created;
 - b. progressively filling the void with compacted inert materials of lesser value which have no adverse environmental impacts and are geo-technically fit for purpose for the ultimate development;
 - c. placing 1-2m high quality suitable sand on top of compacted inert material for development, or water retentive blended soils for landscaping or parks; and
 - d. developing the land ultimately for its highest and best land use.
- 10. By its purpose (to optimise the supply of basic raw materials as close to demand as possible thereby reducing costs especially for transportation) and nature, sequential land must be planned well in advance of an approaching development front such that the resource is mined before the land becomes too valuable for development leading to sterilisation of the resource.
- 11. Sequential land is not, and cannot be, commercially viable if filling the void is subject to the landfill levy.
- 12. Sequential land use differs from the disposal of waste by *inter alia*:

- a. **Environmental protection.** The fill material should not pose any risk of adverse environmental impacts.
- b. **Ecological Investigation Levels (EILs) and Health Investigation Levels (HILs).** Fill material should meet relevant EILs or HILs A, D, E or F depending on end land use. That is, if a site conforms to these criteria as fit for purpose under the *Contaminated Sites Act 2003* criteria without treatment, then fill meeting these criteria should equally be considered fit for purpose in filling voids for the same end land use.
- c. **Fit for purpose.** The fill material should be fit for purpose from an engineering and/or geo-technical perspective.
- d. **Management Plan.** Sequential land use operations should operate under an acceptable management plan. That is, when implemented in accordance with the site management plan the resultant land created from filling a void, or from raising the surface level of land, should demonstrably meet standards appropriate to the designated end land use. This should be independently audited and validated.
- e. **Beneficial end use.** A beneficial end use should be designated in advance of excavation preferably, but certainly in advance of the commencement of filling. Typically this will be the land's highest and best use.
- e. **Compatibility with land use planning objectives.** The identified beneficial end use should be consistent with the planning objectives for the site at local and regional levels.
- f. **Deep v. shallow fill.** Different geotechnical/engineering standards can apply to deep fill as distinct from shallow fill (top 1-2 metres). This is due to the 'super-loading' effect at depth.

Regulating the use of inert materials as a resource

- 13. Where inert materials are re-used or recycled for uses other than fill, then the normal regulatory tools under the *Environmental Protection Act 1986* are applicable and adequate.
- 14. Where inert materials are re-used or recycled productively as a resource for fill, then the regulatory objective should be to protect the environment and to prevent, control and abate pollution and environmental harm.
- 15. The environmental protection quality standards for re-use/recycling inert materials as fill should be those under the *Contaminated Sites Act 2003* (amended as appropriate) (see 11 b.).
- 16. It should be the end users' responsibility to show that these standards have been met.
- 17. The physical characteristics of inert materials as fill are normally managed by engineering/geo-technical standards, not environmental.
- 18. It would be impractical and cumbersome for a system of case-by-case approvals for re-use/recycling of inert materials as fill because decisions need to be made very often on a daily basis. There must be flexibility with responsibility or progress will not be made in increasing re-use/recycling rates.

19. The regulatory mindset must be to make it easy to re-use/recycle inert material while protecting the environment: it must not be over-regulated. Inert materials by definition are low risk – this is acknowledged by DWER⁹.

Achieving re-use and recycling targets in the *Waste Avoidance and Resource Recovery Strategy 2030*

20. Without commercially viable sequential land use, it's hard to see how the relevant re-use and recycling targets for inert materials in the Strategy can and will be met.

Notes and references

1. s.5 of the *Waste Avoidance and Resource Recovery Act 2007*

“5. Objects of this Act

- (1) The primary objects of this Act are to contribute to sustainability, and the protection of human health and the environment, in Western Australia and the move towards a waste-free society by —
- (a) promoting the most efficient use of resources, including resource recovery and waste avoidance; and
 - (b) reducing environmental harm, including pollution through waste; and
 - (c) the consideration of resource management options against the following hierarchy —
 - (i) avoidance of unnecessary resource consumption;
 - (ii) resource recovery (including reuse, reprocessing, recycling and energy recovery);
 - (iii) disposal.
- (2) The principles set out in the EP Act section 4A apply in relation to the objects of this Act”.

2. Figure 3 on page 13 of the *Waste Avoidance and Resource Recovery Strategy 2030*

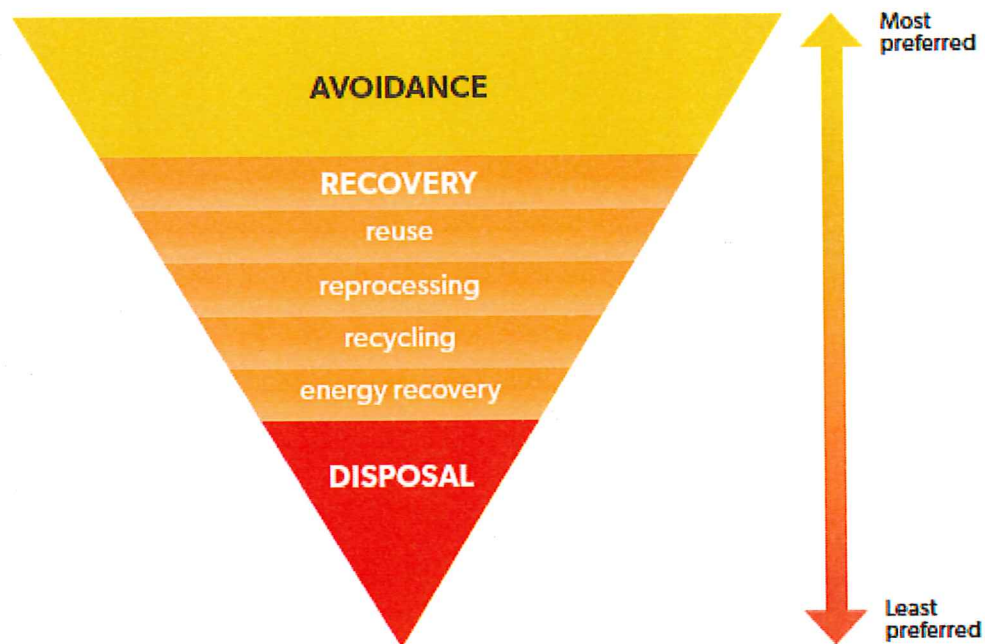
“Waste hierarchy

Waste Avoidance and Resource Recovery Strategy 2030 applies the waste hierarchy, which is a widely accepted decision making tool which is set out in the Waste Avoidance and Resource Recovery Act 2007. The waste hierarchy ranks waste management options in order of their general environmental desirability. The waste hierarchy is used

alongside other tools (including economic, social and environmental assessment tools) to inform decision making.

Waste avoidance is the most preferred option in the hierarchy.

Figure 3: Waste hierarchy



Resource recovery options recover value from materials, thereby offsetting the environmental impacts of extracting and processing raw materials. Energy recovery is the least preferred recovery option.

Disposal is the least preferred option. Disposal generally recovers the least value from materials and delivers the least environmental benefit.

3. See Blue J at [53] in *Corporation of The City of Adelaide v Circelli* [2017] SASFC 12

“In both ordinary parlance and the definition in the Environment Protection Act, waste is a purposive concept and is a relative and not absolute concept. It is not an inherent characteristic of matter that it comprises waste: it must be assessed from the perspective of the person whose purpose is to be considered at the relevant time. For example, an industrial process might produce two products, such as separating seawater into salt and water. A salt producer may regard the water as a useless by-product and hence waste; a water producer may regard the salt as a useless by-product and hence waste; and a dual producer may regard both as products and neither as waste. Waste is the antithesis of a product in ordinary parlance”.

4. Western Australian Waste Strategy "Creating the Right Environment". 2012.
5. National Strategy for Ecologically Sustainable Development endorsed by the Governments of all Australian jurisdictions in the Council of Australian Governments forum in December 1992.
6. Western Australian Planning Commission (2004) Statement of Planning Policy 2.4 Basic Raw Materials.

"6.5 Sequential Land Use

6.5.1 In order to facilitate the exploitation of basic raw materials whilst supporting future long- term development for urban and other purposes, sequential land use planning should be a requirement whereby extraction and rehabilitation can take place on a programmed basis in advance of longer-term use and development".

7. See for example, WA Chamber of Commerce and Industry (2007) "Basic Raw Materials Access and Availability 1996 – 2008". "The opportunity for sequential use programs should be an essential component of the Government's sustainability objectives for development" (Recommendation 9)
- 8.

83. Hon PHIL EDMAN to the minister representing the Minister for Planning:

- (1) Can the minister outline the importance of the extraction of limestone as a strategic raw material south of the river in the metropolitan area for future port, road and building infrastructure?
- (2) Can the minister explain how sequential land use—that is, the backfilling of quarries to produce land for development through subdivision or other useful purposes—is crucial to the viable quarrying of limestone resources in the metropolitan area?

Hon HELEN MORTON replied:

I thank the honourable member for the question. This member does an outstanding job in this area.

- (1) This question raises an important issue about the availability of essential basic raw materials needed for housing and infrastructure development across the state. Limestone, as well as sand, gravel, rock and clay, are important raw materials used in the construction of homes, roads and ports, as well as in industry and agriculture. Depending on its quality, limestone is used for port and breakwater construction, road base and various uses in the construction industry. High quality limestone or lime sand is essential for the manufacture of cement for concrete, plaster and mortars. Limestone, as cut or

compressed blocks, is also widely used for retaining wall construction in new residential subdivisions and as stone in building construction and as pavers. Limestone also plays an important role in many industrial processes such as alumina refining, and in the heavy mineral sands, gold and lateritic nickel industries. It is also used in agriculture to reduce soil acidity and hence improve productivity.

As parts of the Perth metropolitan region and other areas of the state grow to accommodate our strong population growth, a continued supply of affordable raw materials will be required. In particular, a close proximity of supply of materials to new housing development is important in keeping down the cost of land subdivision and housing development, as transportation costs can significantly increase the cost of the raw materials.

Extraction of limestone and other basic raw materials will continue to be an essential part of residential development and infrastructure provision in the southern metropolitan area and elsewhere in the state. Relevant government departments have been working collaboratively over a number of years to plan for basic raw material provision to support the growth of the Bunbury–Busselton region. This has produced a sophisticated demand and supply methodology which will be used in the review of the state planning policy on basic raw materials

- (2) Sequential land use planning involves determining an appropriate end use for land, then allowing other interim land uses to occur prior to its end use. This may include rural land being used for basic raw material extraction, then the land being developed for urban development. Extraction of limestone and backfilling of the quarry for other uses, such as recreational use or residential development, is an example of successful sequential land use. There are some operators in Perth who are able to backfill limestone quarries with clean recycled material, remediate them and then make the land available for residential development. This can be a very successful and efficient use of land. Other examples of sequential development of limestone quarries include Joondalup Resort and golf course, the Flynn Drive industrial estate and the Latitude 32 project. The review of the state planning policy on basic raw materials will provide further guidance on sequential land use planning and other land use planning matters related to the ongoing supply of these important materials.
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9. See for example Gateway WA DWER licence L8790/2013/1 page 4/15. Also Western Australia Auditor General (2016) Western Australian Waste Strategy: Rethinking Waste. e.g. page 10.
10. Hansard. Legislative Council, Thursday 26 June