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2 February 2018

Project Manager
Consultation Paper: Proposed Regulatory amendments to categories 63-66, 89
Department of Water and Environmental Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850

via email: wastereform@dwer.wa.gov.au

Dear Sir / Madam

RE: Amendments proposed following the decision on Eclipse Resource Pty Ltd v the State of Western Australia [No.4] (2016) WASC 62.

Thank you for the opportunity to provide comment in relation to the above proposed amendments.

Alcoa of Australia Limited (Alcoa) represents one of the world's largest integrated bauxite mining, alumina refining and aluminium smelting systems, which add value to Australia's local, state and national economies at every stage. Alcoa operates licensed landfills at the three alumina refineries in Western Australia (WA) and is an end user of fill products.

Alcoa is supportive of the Department of Water and Environmental Regulation's (DWER) efforts to address the unintended consequences related to the decision of Justice Beech in *Eclipse Resources Pty Ltd v The State of Western Australia [No 4]* (2016) WASC 62 handed down on 9 March 2016.

Alcoa highlights the following concerns with regards to the proposed approach and outlines suggested alternative recommendations.

Concern 1: Amendments to landfill categories in the Environmental Protection Regulations 1987 (EP Regulations) do not address the use of fill products at mixed use sites such as Alcoa premises.

- Amend the definition of 'waste' in the Environmental Protection Act 1986 (EP Act) and the Waste Avoidance and Resource Recovery Act 2007 (WARR Act) so that it is given its ordinary meaning of unwanted or excess material. Under that definition, uncontaminated fill and clean fill would be regarded not as 'waste', but as a valuable resource for use in recycling, reprocessing and rehabilitation.
- Modifying the title and definition of 'Landfill Premises' in the Waste Avoidance and Resource Recovery Levy Regulations 2008 (WARR Levy Regulations).
- Update the definition of 'waste' in the EP Act and WARR Act to exempt clean fill and uncontaminated fill from the definition of waste

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o Use the exemption under r.4 of the WARR Levy Regulations.

Concern 2: Amendments to the definitions for clean fill will impose significant costs for sampling and testing and eliminates the ability for crushing and screening activities.

 Alcoa suggests retaining the current definition or modifying the proposed definition to address the concerns around testing and physical treatment.

Concern 3: The new waste definition and criteria for uncontaminated fill are not consistent with other regulations aimed at environmental protection. The criteria are so conservative it is expected that even clean fill deposits would not meet these requirements. The potential implications on the recycling and reuse of materials in the longer term, including unintended consequences for civil construction activities, could be severe.

 Alcoa suggests the criteria used should be consistent with other current regulations aimed at environmental protection.

Outlined below is the detailed explanation of our key issues and recommendations.

Concern 1: Amendments to landfill categories in the EP Regulations do not address the use of fill products at mixed use sites such as Alcoa premises.

DWER propose to amend category 63 to 66 and 89 of the EP Regulations to resolve the issue of the landfill levy being applied to the acceptance of clean fill and uncontaminated fill. This approach does not resolve the issue for mixed use sites that will not meet the proposed definition of a clean fill premises. For example, a facility such as Alcoa may operate a landfill but also utilise fill for development projects outside the landfill.

The proposed amendments do not address the core issue which is whether clean fill, uncontaminated fill and other recycled and reuse products should be considered a waste when not being disposed of to a landfill.

Western Australia lacks the legislative framework to encourage the reuse and recycling of valuable materials back into the economy undermining the key goals of the State's waste strategies. Justice Beech was limited in his judgement to the legislative framework that currently exists in Western Australia. There are fundamental issues with the definition of Waste and Discharge and their application in the EP Act and WARR Act.

The simplest rectification would be to amend the definition of 'waste' in the EP Act and the WARR Act so that it is given its ordinary meaning of unwanted or excess material. Under that definition, uncontaminated fill and clean fill would be regarded not as 'waste', but as a valuable resource for use in recycling, reprocessing and rehabilitation.

Alcoa propose the following interim options to enable a rapid resolution of the issue.

- 1. Modify the title and definition of "Landfill Premises" in the WARR Levy Regulations.
 - Modify the definition title to avoid the term "premises" and change to "Landfill" or "Landfill Site" and update references to avoid confusion with "prescribed premises" utilised in EP Act Licensing.
 - Modify the definition to specify that a "Landfill Site" is limited to the active disposal areas and does not include peripheral infrastructure. Under r.4, this would make only wastes disposed of into active disposal areas of a landfill subject to the levy. This enables use of fill products outside the bounds of the active disposal areas to be exempt from the levy.

means – The active disposal areas of a licensed
landfill; or The active disposal areas of a premises that would, if the occupier of the premises held a licence in respect of the premises as required under the EP Act, be a licensed

Update the definition of 'waste' in the EP Act and WARR Act to exempt clean fill and uncontaminated fill from the definition of waste.

Current	Proposed
waste includes matter —	waste includes matter —
(a) whether liquid, solid, gaseous or radioactive and whether useful or useless, which is discharged into the environment; or	(a) whether liquid, solid, gaseous or radioactive and whether useful or useless, which is discharged into the environment; or
(b) prescribed by the regulations to be waste;	(b) prescribed by the regulations to be waste; and
	(c) does not include clean fill or uncontaminated fill as defined in the Landfill Waste Classification and Waste Definitions 1996

3. Alter r.4 of the WARR Levy Regulations so the levy does not apply to clean fill and uncontaminated fill.

Current	Proposed
4. Application (1) Subject to any exemption granted on application under regulation 5, these regulations apply to — (a) all waste received at landfill premises in the metropolitan region on or after 1 July 2008; and (b) all waste collected within the metropolitan region, irrespective of when it is collected, and received at landfill premises outside the metropolitan region on or after 1 July 2008; and (c) return periods commencing on or after 1 July 2008.	4. Application (1) Subject to any exemption granted on application under regulation 5, these regulations apply to — (a) all waste, excluding clean fill or contaminated fill as defined in the Landfill Waste Classification and Waste Definitions 1996, received at landfill premises in the metropolitan region on or after 1 July 2008; and (b) all waste, excluding clean fill or contaminated fill as defined in the Landfill Waste Classification and Waste Definitions 1996, collected within the metropolitan region, irrespective of when it is collected, and received at landfill premises outside the metropolitan region on or after 1 July 2008; and (c) return periods commencing on or after 1 July 2008.

Concern 2: Amendments to the definitions for clean fill will impose significant costs for sampling and testing and eliminates the ability for crushing and screening activities.

As an end user of fill products and a strong advocate for material re-use and diversion from landfill, Alcoa has concerns with regards to the proposed amendments of the Waste Definitions in the Landfill Waste Classification and Waste Definitions 1996.

Alcoa note that the definition of clean fill is markedly different to that proposed and finalised in the Consultation Summary Material Guideline: Clean Fill December 2014. The proposed definition results in the following issues/questions;

- What is the definition of raw; this is unclear?
- It is impossible to confirm whether the land has been contaminated with agriculture, manufactured chemicals or process residues without some form of testing regime, of which no guidance has been provided on acceptable or background levels.
- Contaminants are limited to industrial, commercial, mining and agricultural activities; why does the source of contaminant matter?
- The definition restricts any physical screening or crushing of clean fill.

Alcoa request that the definition of clean fill remain as is or be modified as below to address the issues raised above.

Clean fill means natural material such as clay, gravel, sand, soil or rock fines that:

- (a) has been excavated or removed from the earth in areas that are not reportedly contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities;
- (b) does not contain any acid sulfate soil;
- (c) does not visibly contain any other type of waste; and
- (d) has not, since it was excavated or removed from the earth, been used or subject to processing of any kind not including physical processing such as crushing and screening.

Concern 3: The new waste definition and criteria for uncontaminated fill are not consistent with other regulations aimed at environmental protection. The criteria are so conservative it is expected that even clean fill deposits would not meet these requirements. The potential implications on the recycling and reuse of materials in the longer term, including unintended consequences for civil construction activities, could be severe.

The definition of uncontaminated fill raises numerous concerns as outlined below.

- Referencing Inert Waste Type 1, fill that requires treatment to render it inert, means acid sulfate soils will be excluded from this category. This severely restricts opportunities for the reuse and recycling of different fill materials. Suggest taking the elements of the Inert Type 1 definition and incorporating directly into the uncontaminated fill definition;
 - uncontaminated fill means non-hazardous, non-biodegradable (half-life greater than 2 years) wastes (excluding asphalt and biosolids) that meets the requirements set out in Table 1, as determined by sampling and testing carried out in accordance with the requirements set out in Table 2

- For a material to qualify as uncontaminated fill, it needs to meet the criteria set for both Contaminant Threshold (CT) and the Leach Concentration Limit (LCL). Other regulations aimed at environmental protection (Waste Regulations, National Environment Protection (Assessment of Site Contamination) Measure, Contaminated Sites Act 2003) adopt a tiered approach to assessment where the CT is used as an initial screening, and only if the CT is exceeded, it is necessary to progress to further. This change will add a significant level of additional conservatism and cost that is not required in other environmental protection measures.
- The proposed LCLs in Table 2 are extremely conservative; they are a major shift from the current Type 1 Inert waste criteria. The changes to the proposed LCLs are all several orders lower than those required for a Type 1 inert fill. It should be noted that at such conservative levels, it is unlikely that any clean fill would qualify as uncontaminated if tested.
- There is no transparency on where the criteria for uncontaminated fill has been sourced and why this level of conservatism has been adopted. The levels are orders of magnitude lower than inert criteria in the EU Landfill Directive and the most conservative limits for unrestricted use in the Dutch Soil Quality Decree.

Alcoa sees the adoption of such criteria as having two potentially significant effects in terms of re-use of by-products.

- They will be used as an initial screening of potential by-products, eliminating many (if not all) opportunities for re-use of materials on a first level assessment.
- There is currently no accepted framework for further assessment of by-product materials, so an immediate risk barrier will be created for both the producer and the user of the materials.

Even if an assessment framework is created in the future (such as the proposed Waste Derived Materials framework), the community will remain suspicious of any materials that fail to meet the uncontaminated fill criteria.

If DWER are going to set acceptance criteria for certain materials to be used as fill (in the absence of any assessment framework), Alcoa would like to see these criteria being set consistent with other current regulations aimed at environmental protection, rather than create a new set of overly conservative criteria which have the effect of stifling efforts aimed at re-use and recycling.

Alcoa thanks DWER for the opportunity to provide feedback on its Consultation Paper: Amendments proposed following the decision on Eclipse Resource Pty Ltd v the State of Western Australia [No.4] (2016) WASC 62. For additional information, please contact Diane Dowdell (diane.dowdell@alcoa.com.au).

Yours sincerely

Simon Butterworth

Chief Operating Officer, Alumina