



Feedback form

Draft Guideline: Submitting an application for the use of waste-derived materials (case-by-case determination)

Respondent information

Company or association represented by this submission

Alcoa

Your name

David Cooling

Postal / business address

Alcoa Kwinana Refinery
P. O. Box 161
Kwinana, Western Australia 6167

Email

[Redacted]

Phone number

[Redacted]

Why are you/your business or association interested in the draft *Guideline: Submitting an application for the use of waste-derived materials (case-by-case determination)*?

Alcoa's operations generate large volumes of bauxite residue with significant potential for reuse, however, this is currently restricted by policy gaps. Alcoa believes there is a pressing need for a formal policy process to be adopted by DER to help facilitate the approval and use of Bauxite Residue by-products

Consent to treat this submission as a public document

By making a submission, you are consenting to the submission being treated as a public document and being published on the department's website. Your name will be included but your contact address will be withheld for privacy.

If you do not consent to your submission being treated as a public document, you should mark it as confidential, specifically identify those parts which you feel need to be kept private, and include an explanation. The department may request that a non-confidential summary of the material is also given. It is important to note that even if your submission is treated as confidential by the department, it may still be disclosed under the *Freedom of Information Act 1992* or any other applicable written law. The department reserves the right before publishing a submission to delete any content that could be regarded as racially vilifying, derogatory or defamatory to an individual or an organisation.

I acknowledge that this submission will be treated as a public document

This submission is confidential

If you have marked your submission as confidential, specifically identify those parts which you feel need to be kept private, and include an explanation.

[Empty text box for explanation]

Feedback on section 3: Application process

Are there any parts of the application process set out in section 3 where the requirements are not clear?

General comments

Alcoa commends the DER for taking this initiative. It should allow a more formal approach to the assessment and approval for use of by-product materials. However, Alcoa remains somewhat concerned that this is just a guideline which is not a very strong administrative tool. Can you please clarify how the guideline will be formalised within the existing DER regulations, and whether DER will continue to work toward having the process recognised within a legislative framework? Can you please also clarify the steps that DER will take after receiving an application and the timeframes for these steps?

Specific comments

Page No.	Comments
3	Introduction. Priority for the development of the guidelines is based primarily on reducing the volume of material going to landfill. Alcoa would like to see high priority also given to materials which fill a key strategic raw material need and have strong sustainability attributes.
4	Purpose. A successful application will see the material being recognised by DER as ceasing to be a “waste”. However, it is not clear if DER see the material becoming a “product” with associated producer responsibilities under consumer law. There are requirements within the guidelines for controls on product quality and use, with inspections by DER – this would tend to imply DER are retaining some responsibility and oversight for how the WDM is produced and used which in turn implies a level of ongoing regulation by DER. Hence it is not clear where a proponent sits in terms of producer responsibilities and consumer law verses continued regulation under DER.
4	Review. Clarification that any update or amendment to the guideline or associated guidelines such as the NEPM or Contaminated Sites legislation will not be retrospective to approvals already gained under these guidelines.
6	Applicability. The table on page 6 states “All WDMs considered under the end-of-waste framework must be used to replace a raw material”. This definition is quite narrow and will preclude the use of a number of potential by-products replacing other products on the market or potential new applications for the materials. Alcoa believes this limitation should be removed.
6	Manufactured Fill. There is a statement that DER is developing a specific category for manufactured fill. It isn't clear whether industrial by-products which are being considered as fill will be assessed under this application or could be covered under the specific fill category. Further clarification as to the types of materials which will be covered by the specific category (a listing or table of the materials included) would be useful here.

Feedback on Section 4: Key considerations for the production and use of WDMs

Are there any parts of section 4 where the requirements are not clear?

General comments

Further clarification of the role and purpose of the NEPM criteria would be useful. It states that the criteria were not “developed as criteria for determining the suitability of a WDM to replace a raw material”. But it refers to these guidelines in characterising the material. Improved clarity on how the contaminated sites legislation and NEPM are used in the assessment of a WDM would be helpful.

Specific comments

4.1 Characteristics of the WDM

Page No.	Comments
11	Approvals under the Planning and Development Act. The statement here implies that if the material is to be used in a development covered by the Act, prior approval for use needs to be granted (by the developer?) prior to submission of this application to DER. It has been Alcoa’s experience that a developer will be looking to see that DER has approved the material prior to considering its use. This requirement also implies that an application needs to be re-submitted each time a material is to be used in any such development. Hence, this seems to be an unworkable and unrealistic expectation for a continuously produced material (such as Red Sand)

4.2 Risk Assessment

Page No.	Comments
14	Auditor. Alcoa can appreciate the desire for an independent review with advice to the DER, however, limiting this to accredited DER Contaminated Sites auditors is too restrictive. Many of the test procedures and Risk Assessment approaches that have been adopted in Europe and the US (and to which you refer in the guideline) would be unfamiliar to the auditors. Alcoa would like to see the role of independent reviewer extended to any recognised expert in the field of risk based assessments of by-product materials.
14	End User Instructions or Agreements. The guideline is silent on transfer of risk and title and any extended producer responsibilities. Alcoa’s expectation is that there will be a clear transfer of risk and title at the point of sale of the WDM. The user will then be responsible for the use of the WDM in accordance with the manufacturer’s instructions. The manufacturer cannot be held liable if the user fails to follow these instructions, or the material is subsequently re-used in a non-approved application. Failure to address this issue may make important reuse opportunities commercially unviable.

4.3 Quality assurance and control procedures

Page No.	Comments

4.4 Record keeping and audit procedures

Page No.	Comments

4.5 Review by other agencies	
Page No.	Comments
16	Review by other Agencies. The guideline requires the proponent to “seek advice or prior written approval from all other relevant agencies”. The agencies who would be interested would be best determined by the DER, as each WDM is likely to have unique considerations with respect to the other Agencies, and if the Agencies identified do not have guidelines or mechanisms for managing the WDM applications, it is unlikely that they will be able to respond directly to the applicant. It would be preferable for DER to help facilitate these other agency reviews and approvals as a part of this application process.

Are the requirements set out in section 4 sufficient to demonstrate that a WDM does not pose an unacceptable risk to public health and the environment?

General comments

--

Specific comments

4.1 Characteristics of the WDM	
Page No.	Comments

--	--

4.2 Risk Assessment	
Page No.	Comments
14	Raw leach data should not be used as a direct comparison to guidelines. The leach data can be used as an initial screen to determine elements of concern but modelling is required to determine elemental release over time. There are a range of different modelling approaches that can be used - any auditor is going to need to be knowledgeable in the methods that an applicant is using in the risk assessment (see comments above related to auditors).

4.3 Quality assurance and control procedures	
Page No.	Comments

--	--

4.4 Record keeping and audit procedures	
Page No.	Comments

4.5 Review by other agencies	
Page No.	Comments

DER has introduced the concept of a ‘comparator’ (section 4.2.1) to streamline risk assessment for WDMs that are being used to replace a raw material in an equivalent use, where the WDM has comparable characteristics to the raw material. Comments are sought on the appropriateness of this approach

General comments

Alcoa agrees that any assessment against a comparator is useful and should be on the basis of leachability, not total composition. A WDM may have a similar total composition of certain elements, but very different leaching characteristics of these elements – it is the leaching component that is environmentally important. It is unlikely that a single natural raw material will cover all of the elements in a WDM, but there may be a number of raw materials where single elements can provide a comparator. For example; the leachability of element X may be similar to that in limestone, while the leachability of element Y is similar to that in gravel.

Additional feedback

This draft guideline outlines the general application process and information requirements for the use of WDMs. Noting that additional requirements for manufactured fill are currently being prepared, for what types of WDMs should additional application guidance be considered?

Soil Amendments
Composts with mineral additives
Road construction materials

Do you have any additional feedback on any aspect of the draft *Guideline: Submitting an application for the use of waste-derived materials (case-by-case determination)*?

Additional feedback

Initial assessments of potential WDM will usually require testing and validation works. Operational licenses of facilities where the initial wastes are generated can be quite restrictive in terms of releasing these waste materials for research and development purposes. Also, if the materials are classed as a controlled waste, the site on which the trial is to take place needs to be licensed to receive the materials for testing/trials. There needs to be a formal mechanism for authorisation of the WDM product test and development activities. It is proposed that either a notification or approval process be introduced to facilitate progressing trial activities with the waste for the purpose of developing the outcomes required to get approval for the WDM. In most instances the criteria to establish a material as a WDM will only be established through both laboratory and field trial work. The WDM development cycle is not currently catered for in the framework and may constrain/limit development opportunities.