



Consultation summary

Manufactured fill addendum to the Guideline: Submitting an application for the use of waste-derived materials (case-by-case determination)

Produced and published by

Department of Environment Regulation, 168 St Georges Terrace, Perth, Western Australia

August 2015

Copyright © State of Western Australia 2015

All material is the copyright of the State of Western Australia. Permission is not given for any commercial use or sale of this material. No part of the contents of the publication may be reproduced by any process, electronic or otherwise, distributed, adapted, broadcast, performed in public or communicated to the public without the written consent of Department of Environment Regulation, except as permitted under the Copyright Act 1968.

Disclaimer

The information contained in this document is provided by Department of Environment Regulation in good faith. However, there is no guarantee of the accuracy of the information contained in this document and it is the responsibility of users to make their own enquiries as to its accuracy, currency, relevance and correctness.

The State of Western Australia and Department of Environment Regulation and their servants and agents expressly disclaim liability, in negligence or otherwise, for any act or omission occurring in reliance on the information contained in this document, or for any incident or consequential loss or damage of such act or omission.

The State of Western Australian is committed to providing quality information and has made every attempt to ensure the accuracy, currency, reliability and correctness of the information contained in this document. However, changes in circumstances and legislation after the time of publication may impact on the correctness or quality of this information.

In addition the accuracy, currency, reliability and correctness of links or references to information sources referred to or provided by third parties is outside the control of State of Western Australia and it is therefore the responsibility of the user to make their own decisions on information found on those external sites. Confirmation of any of the information provided in this document may be sought from the relevant originating bodies or the department providing the information; however, users of this material should verify all relevant representations, statements and information with their own professional advisers.

The State of Western Australia and Department of Environment Regulation reserve the right to amend the content of this document at any time without notice.

The information contained in this document is general. It does not constitute, and should be not relied on as, legal advice. The State of Western Australia recommends that users of this information seek advice from a qualified lawyer on the legal issues affecting them before relying on this information or acting on any legal matter.

Questions regarding this report should be directed to:

Department of Environment Regulation
Locked Bag 33 Cloisters Square
PERTH WA 6850
Phone: +61 8 6467 5000
Fax: +61 8 6467 5562
Email: info@der.wa.gov.au
Web: www.der.wa.gov.au

Accessibility This document is available in alternative formats and languages upon request.

CONTENTS

Background	1
Summary of consultation submissions	1
Summary of responses to submissions	1
Consultation submissions	3
Are there any parts of the guideline where the requirements are not clear?	4
Are the requirements sufficient to allow applicants to demonstrate that manufactured fill will not pose an unacceptable risk to public health and the environment?	5
General comments	6

Background

On 30 June 2015, the Department of Environment Regulation (DER) released the draft *Manufactured fill addendum* to the *Guideline: Submitting an application for the use of a waste-derived material (case-by-case determination)* (the Addendum). Comments were invited on any aspect of the draft Addendum, in addition to questions on issues of particular interest to DER.

Consultation closed on 28 July 2015. This document summarises the submissions, key issues raised, and responses to these issues.

Summary of consultation submissions

Four submissions were received in relation to the draft addendum. Key issues raised in the submissions were:

- clarification on specific requirements that apply to an application and the circumstances for when they apply;
- a perceived conflict between sections of the document related to the extent of physical contamination that can be included in a product;
- concerns on the number of environmental and technical standards that must be met; and
- a request for support, incentives and assistance for industry.

Summary of responses to submissions

The final *Manufactured fill addendum* to the *Guideline: Submitting an application for the use of a waste-derived material (case-by-case determination)* includes amendments that address or clarify key issues raised in the consultation:

- The Addendum is designed to ensure that manufactured fill does not cause an unacceptable risk to human health or the environment. Manufactured fill, including by-products of normal day-to-day commercial and industrial activities, may contain a variety of contaminants and an application is required to demonstrate that the potential risks have been considered and addressed.
- The Addendum outlines specific requirements for manufactured fill which are in addition to, or clarify in this context the requirements outlined in *Guideline: Submitting an application for the use of a waste-derived material (case-by-case determination)*.
- The Addendum now includes additional guidance about the risk of certain contaminants being present.
- Methods for removal or segregation of unsuitable materials must be provided in the application. The sections in the Addendum regarding waste treatment and the proposed product specification have been better aligned to address concerns that two sections were inconsistent.
- The *Guideline: Submitting an application for the use of a waste-derived material (case-by-case determination)* and the Addendum set out a process for assessing whether a waste derived material (WDM) has ceased to be waste. Applicants may draw on existing, recognised codes of practice, standards or specification and

provide relevant information to support an application. Codes of practice or standards not developed or adopted by DER cannot be used as a substitute for DER's application requirements.

- The extent of information required for an application is based on the potential risk to human health and the environment and the need for controls on the manufactured fill. It is therefore reasonable that where detailed information is necessary to support the use of the manufactured fill, the cost of the application is borne by the business.

Consultation submissions

The consultation paper specifically sought comments in relation to two questions, namely:

1. Are there any parts of the guideline where the requirements are not clear?
2. Are the requirements sufficient to allow applicants to demonstrate that manufactured fill will not pose an unacceptable risk to public health and the environment?

Four submissions were received as listed in Table 1.

Table 1: Consultation submissions received

Organisation
Department of Water
Waste Management Authority of Australia (WA Branch)
Western Australian Local Government Association
Department of Health

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

Summary of submissions

Two submissions suggested section 4.1.2 of the draft Addendum should be clarified to provide certainty for when testing may be required. It was suggested that this section be restructured so that it clearly identifies the requirements and when they would apply.

One submission noted that section 4.1.7 seemed to imply that some contamination is acceptable, however section 4.1.3 specifies that methods of removal or segregation must be provided in the application which implies no contamination is acceptable.

One submission suggested that limits for total sulfur under varying circumstances should be provided.

Response to submissions

Section 4.1.2 in the Guideline details a number of items that need to be addressed by the applicant, including an analysis of potential contaminants of concern that the waste may contain. The Guideline requires applicants to “consider whether the waste has come from a site where a previous use ... indicates that contaminants ... may be present. If so: describe the potential contamination with reference to DER’s *Guideline for assessment and management of contaminated sites* (2014).” Appendix B of DER’s *Guideline for assessment and management of contaminated sites* sets out a non-exhaustive list of potentially contaminating activities and land uses, and the associated contaminants.

The case by case assessment framework requires applicants to investigate the source(s) of waste being used to prepare WDMs, and evaluate the associated risks to public health and the environment.

The corresponding section in the Addendum outlines specific issues associated with potential sources of manufactured fill that are not considered in Appendix B of the *Guideline for assessment and management of contaminated sites*. The Addendum is intended to highlight the additional information required in certain applications to demonstrate appropriate risk analysis (with appropriate testing and presentation of results where relevant, as set out in the Guideline). The Addendum is not intended to provide a definitive list of tests required.

The Addendum was amended to:

- clarify DER’s expectation of the role of Appendix B of *DER’s Guideline for assessment and management of contaminated sites* in guiding the preparation of applications for assessment;
- provide further guidance on the risk period associated with contaminants where such information was available; and
- improve clarity regarding the additional information that may be required.

Section 4.1.3 highlights construction and demolition (C & D) waste used to manufacture fill and seeks information from the applicant on how unsuitable materials will be removed or minimised. The Addendum was amended to link this section to the proposed product specification.

Section 4.1.7 describes the proposed product specification for manufactured fill. The majority of unsuitable materials are likely to have been removed or segregated, however there may still be some low levels of unsuitable materials present. This will be different for each type of product and the proposed use. It is the end user's responsibility to ensure that the product is technically suitable and otherwise fit for purpose and that the product does not cause environmental harm, pollution, unreasonable emissions or unauthorised discharges contrary to the EP Act or other legislation related to WDMs.

The Addendum notes that sulfur concentrations as low as 0.25 per cent can cause sulfate attack and heaving problems on infrastructure. The Addendum does not set limits as these will vary depending upon the proposed location and nature of use of the product. The applicant is expected to include and justify a limit where appropriate.

Are the requirements sufficient to allow applicants to demonstrate that manufactured fill will not pose an unacceptable risk to public health and the environment?

Summary of submissions

The number of environmental and technical standards that are required to be met to enable the use of the product was raised. It was suggested that there be one overarching standard instead.

One respondent supported avoiding use of manufactured fill near water bodies. It was recommended that reference to public drinking water source areas be consistent with terminology from the Department of Water. Additional sensitive uses that applicants may wish to identify as use constraints (near private bores used for irrigating crops, human consumption or livestock consumption, and within those parts of public drinking water source areas classified for priority one protection) were suggested.

Response to submissions

The Guideline and Addendum set out information requirements for an assessment process, rather than setting a standard. DER has taken this approach because the diversity of sources and uses of manufactured fill within Western Australia present significant challenges to developing a single standard. The future development of a single standard will be informed by case-by-case applications received.

Applicants may draw on existing, recognised codes of practice, standards or specification and provide relevant information to support an application. Codes of practice or standards not developed or adopted by DER cannot be used as a substitute for DER's application requirements.

The Addendum has been amended to include avoiding use of manufactured fill near private bores that are used for potable water, irrigating crops, or watering livestock. The addendum now refers to public drinking water source areas, rather than public water source protection areas and makes reference to priority one source protection areas as a use constraint.

General comments

Summary of submissions

Two submissions recommended the addendum be applied to the process of generating manufactured fill rather than requiring an application for every project that included manufactured fill.

Two respondents suggested changes to the year from which asbestos should not be present in buildings. One wanted the phrasing to align with the Department of Health and state “before 1990”, rather than “before the late 1980s”. The Department of Health noted that although phased out in the late 1980s, stockpiled asbestos may have been used in buildings in the early 1990s and suggested this be included.

While noting the need to protect the environment, two respondents raised concerns that the level of requirements was too onerous and would discourage new products from being developed. It was suggested that incentives for product development should be introduced. It was also suggested that support and assistance was provided to the industry to ensure that producers comply with the requirements.

Response to submissions

The application requirements set out in the Guideline outline minimum information required, including production processes and proposed uses. When an application is approved, additional uses may be proposed provided that they are consistent with the original approved production process. Different types of waste have different contamination risks, and producers’ processes must recognise and manage these risks to ensure the manufactured fill meets their proposed specification. Additional case by case assessment may be appropriate where potential waste sources are not consistent with the producer’s established processes or quality controls.

To ensure that asbestos contamination is considered, the Addendum was amended to include text suggested by the Department of Health. In the consultation for the *Construction Products Material Guideline*, one submission did not support alignment between the material guideline and the DER’s *Guidelines for managing asbestos at construction and demolition waste recycling facilities* as it treats all sites as likely to have some asbestos contamination.

The risks of asbestos contamination are clearly articulated in the publication *Asbestos: A guide for householders and the general public*¹.

The Addendum (and Guideline) were prepared to manage the range of waste sources and WDM uses that are likely to occur. The extent of information required for an application is based on the potential risk to human health and the environment and the need for controls on the WDM.

DER is a regulator and has prepared these documents to provide guidance to applicants. It is the responsibility of applicants and/or end users to ensure that they comply with any other legislative requirements for their product or use.

The extent of information required for an application is based on the potential risk to human health and the environment and the need for controls on the manufactured fill. It is therefore reasonable that where detailed information is necessary to support

¹ Environmental Health Standing Committee (enHealth), *Asbestos: A guide for householders and the general public*, Australian Health Protection Principal Committee, Canberra, 2013.

the use of the manufactured fill, the cost of the application would general be borne by the business.

The use of incentives to overcome market barriers and encourage use of manufactured fill is beyond the scope of this Addendum.