



Consultation summary

Material guideline: Clean fill

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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

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Background

The Department of Environment Regulation (DER) is seeking to encourage the use of waste-derived materials (WDMs) in circumstances where their use does not cause an unacceptable risk to the environment to divert waste from landfill and reduce the demand for raw materials and fossil fuels.

The [Guidance statement: Regulating the use of waste-derived materials](#), published in November 2014, supports this objective. The guidance statement sets out DER's intention to develop material guidelines that establish specifications for the production and use of WDMs. The guidance statement also sets out the "end-of-waste criteria" that DER will apply through the material guidelines to determine when waste has ceased to be waste.

On 20 November 2014, DER released the *draft Material guideline: Clean fill*. Comments were invited on any aspect of the draft material guideline in addition to questions on issues of particular interest to DER.

Consultation closed on 17 December 2014, with 18 submissions received. This document summarises these submissions, the key issues raised, and responses to these issues.

The draft *Material guideline: Clean fill* is one of a series of material guidelines that have been developed in accordance with the guidance statement. The development of the draft *Material guideline: Clean fill* has been informed by industry stakeholders and key government agencies through workshops and public consultation.

Summary of consultation submissions

Eighteen submissions were received in relation to the draft *Material guideline: Clean fill*. These were generally supportive, and primarily raised issues of clarification.

Key issues raised in the submissions were:

- inconsistency between the clean fill definition, which requires clean fill to be from undisturbed sites, and the permitted sources of clean fill in the draft material guideline, which include potentially disturbed sources;
- contradiction between the proposed sampling and testing regime and the definition of clean fill as undisturbed material;
- application of the three-dimensional systematic grid for sampling—for example, how it would apply to *in situ* material;
- the prohibition on use of clean fill below the groundwater table, which would restrict its wider use;
- a recommendation to develop a flow chart or diagram to clarify the process required for a material to be considered compliant under the material guideline;
- the need for a firm time frame and triggers for review of the guideline; and
- issues relating to manufactured fill, a material guideline for which is currently in preparation.

Summary of responses to submissions

The final material guideline for clean fill includes a number of amendments that address issues raised in the consultation.

The definition of clean fill has been clarified as follows:

Clean fill means material that will have no harmful effect on the environment and consists of rocks or soil, or a combination of rocks and soil which is extracted in a raw, unaltered form and which has not previously been used, consumed or subject to processing of any kind.

The new clean definition resolves queries raised about the term ‘undisturbed’ in the clean fill definition and the table of potential sources of clean fill (including potentially contaminated material) that was included in the draft guideline.

The new clean fill definition also resolves a number of additional queries raised by stakeholders in the consultation, including:

- It has allowed for the removal of the sampling and testing requirements. A material guideline for manufactured fill is in preparation and will establish specifications for waste derived fill that does not meet the clean fill specifications.
- The limit on the use of clean fill to above the highest seasonal level of the groundwater table has been removed.
- As a result of the simplification of the operational control procedures, including removing of sampling and testing requirements, there is no longer a need for a process flow chart.

In addition to the key concerns raised by stakeholders, minor issues were raised in the consultation submissions and have been considered by DER. Where appropriate, the revised material guidelines reflect amendments made to address the minor issues identified.

DER thanks all respondents for taking the time to respond to the consultation.

Consultation submissions

The consultation paper specifically sought comment in relation to the following three questions:

1. Are there any parts of the guideline where the requirements are not clear?
2. To provide consistency for producers of clean fill, the sampling approach proposed in the draft material guideline is aligned with that in the [Guidelines for managing asbestos at construction and demolition waste recycling facilities](#), DEC, 2012. Comments are sought on the appropriateness of this approach.
3. Do you consider that the draft material guideline will be practical and achievable for industry to implement?

Rather than addressing the specific questions, most organisations chose to provide general feedback, or commented by section. Eighteen submissions were received as listed in Table 1.

Table 1: Consultation submissions received

Organisation	Acronym / Abbreviation
Alcock Brown-Neaves Group	ABN
All Earth Group	AEG
Australian Industries Group (Waste Industry Alliance WA)	AIG
City of Busselton	CoB
Consilium Waste Consulting	CWC
Department of Agriculture and Food, Western Australia	DAFWA
Douglas Partners	DP
Eclipse Resources	E
Emission Assessments Pty Ltd	EA
Housing Industry Association	HIA
Instant Waste Management	IWM
Landcorp	LC
Paul Byrnes	PB
Marshall Exports P/L	ME
Water Corporation	WC
Waste Management Association Australia (WA)	WMAA
Western Australian Local Government Association	WALGA
Urban Development Institute of Australia (WA)	UDIA

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

Summary of submissions

Several submissions raised issues with the clean fill definition and acceptable sources of clean fill, including:

- the requirement that clean fill be sourced from “undisturbed material” contradicts the list of sources provided in the guideline;
- the guideline definition of clean fill being different to the definition provided in the *Landfill Waste Classification and Waste Definitions*;
- some waste-derived sources of fill, such as fill manufactured from mixed construction and demolition, not being included in the guideline;
- the definition of clean fill not taking into account that Western Australia has soils that contain naturally high levels of some contaminants.

Respondents requested further clarification as to whom the guideline was intended to apply. A related comment was that the definition of ‘producer’ differed between the clean fill and construction products guidelines.

Some respondents found the pre-acceptance, acceptance and testing requirements for clean fill confusing, and requested a simple flow chart to clarify this process.

DER response to submissions

The definition of clean fill has been amended and clarified in the final guideline as:

Clean fill means material that will have no harmful effect on the environment and consists of rocks or soil, or a combination of rocks and soil which is extracted in a raw, unaltered form and which has not previously been used, consumed or subject to processing of any kind.

This definition is intended to clarify the application of the end-of-waste framework for materials that do not require sampling or testing. The introduction of non-permitted material, such as that in the *Landfill Waste Classification and Waste Definitions* (1996), would introduce the need for a sampling and testing regime. A material guideline for manufactured fill is in preparation and will establish specifications for waste-derived fill that does not meet the clean fill specifications.

The term ‘producer’ has been replaced with ‘generator’; in the final clean fill guideline. Generator is defined as follows:

generator means a person who extracts or supplies clean fill to an end user.

This is because the revised definition of clean fill does not require processing.

A flow chart is no longer required as the operational control procedures (including the removal of sampling and testing requirements) have been simplified.

Alignment between the sampling approach proposed in the draft material guideline and the Guidelines for managing asbestos

Summary of submissions

Respondents were generally supportive of the alignment of the clean fill material guideline with the *Guidelines for managing asbestos at construction and demolition waste recycling facilities* (DEC 2012).

Response to submissions

DER notes this response.

Do you consider that the draft material guideline will be practical and achievable for industry to implement?

Summary of submissions

Issues identified with the practicality and achievability of the material guidelines primarily related to the operational control procedures for clean fill, particularly requirements for sampling and testing.

The requirement under acceptance and excavation procedures to spread the material to a depth of less than 30cm to inspect was viewed as onerous, requiring a high number of plant and operational staff, and a large area.

The rationale of the three-dimensional systematic grid sampling design was also queried. It was indicated that it is standard industry practice for material to be inspected either when it is excavated, loaded at the point of excavation or when it is unloaded, and that stockpile sampling does not reflect industry practice or provide guidance on sampling material *in situ*.

Some respondents did not support the requirement that waste not be blended to produce clean fill. This view proposed that if the final product for end use met the product specification it should be sufficient to prevent environmental harm, and that the individual streams should not have to be tested.

Response to submissions

DER has refined the operational control procedures in the final clean fill material guideline in response to issues raised.

The final material guideline no longer has a prescriptive requirement on how waste is spread and inspected, and instead provides an outcome-based approach to ensuring that a comprehensive visual and odour check is carried out.

Following the revised clean fill definition, there is no requirement for sampling and testing. The only permitted waste streams that may be blended are natural rocks and soil as provided for in the definition of clean fill.

Other issues raised during consultation

A number of respondents supported the use of a broad range of clean fill sources to be accepted within the material guideline so long as they meet the product specification requirements.

It was noted that ecological investigation levels (EILs) in the DER's *Contaminated Sites Management Series: Assessment levels for Soil, Sediment and Water* are investigation levels, not validation levels. Exceedence of these levels is a trigger for further investigation and risk assessment to determine whether harm to the environment will occur. Submissions proposed that the EILs be included in the material guideline rather than referenced. Respondents suggested that the *National Environment Protection (Assessment of Site Contamination) 1999* (NEPM) revised in 2013 should replace the EILs.

Response to submissions

In recognition that sources of clean fill can come from a broad range of locations (land uses), DER has removed the sources of waste, and relied on the product specification for clean fill in section 2. There is no longer a direct reference to the EILs as sampling and testing is not required. However, the definition of "contaminated" refers to DER's guideline for *Assessment and management of contaminated sites* (2014) following the release of the revised NEPM.

Authorised uses

The limitation on use below the highest seasonal level of the groundwater table appears to imply that all clean fill is contaminated and could impact on groundwater. Submissions proposed that the only restrictions on clean fill should be those placed on virgin materials and that limiting its use to above the groundwater table would be restrictive to industry and counterproductive to the outcomes of the guidance statement.

Response to submissions

This limitation was included based on Western Australia's reliance on groundwater together with its highly permeable granular soils.

DER has removed the limitation on use below the highest seasonal level of the groundwater table as it is satisfied that the product specification provides sufficient protection.