



2 February 2018

Project Manager
Proposed regulatory amendments to categories 63-66, 89
Department of Water and Environmental Regulation
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Consultation Paper: Amendments proposed following the decision on *Eclipse Resources Pty Ltd v The State of Western Australia* [No.4] (2016) WASC 62

The Public Transport Authority (PTA) supports the intent of the proposed amendments to allow for the use of excavated material which is fit for purpose and suitable for use without the requirement for a licence or payment of the waste levy. The PTA considers that the proposed amendments will have unintended consequences which are inconsistent with the Western Australian Waste Strategy and the principles of the *Environmental Protection Act 1986*.

The PTA considers that the proposed amendments may have the following unintended consequence.

Excavated material which is

- Fit for purpose;
- Suitable for use; and
- Can be demonstrated, via risk assessment, to not pose an unacceptable risk of harm to the environment or human health,

does not meet the definition of Clean Fill or Uncontaminated Fill and therefore must be disposed of at a licenced landfill. This could result from:

1. No provision for Site-specific Risk Assessment
2. No provision to reuse treated acid sulfate soil
3. Uncontaminated Fill thresholds above standard laboratory detection limits
4. Uncontaminated Fill thresholds below ambient levels
5. Uncontaminated Fill thresholds inconsistent with waste thresholds
6. Lack of implementation guidance

This would have a significant cost impact to the public and private sectors and result in a resource being unable to be reused. The PTA therefore considers that revisions to the proposed amendments are required.

1 No provision for Site-specific Risk Assessment

Generally, there are two ways to assess if excavated material poses an unacceptable risk of harm to the environment or human health and therefore if the material is fit for purpose and suitable for use. These are:

1. Compare test results from the excavated material with generic screening criteria.
2. Undertake a Site-specific Risk Assessment to determine if the test results from the excavated material pose an unacceptable risk of harm to the environment or human health based on the specifics of the site which will receive the excavated material.

Option 1 is the proposed basis of determining if an excavated material meets the definition of Uncontaminated Fill. There is no provision for Option 2 within the proposed amendments.

Resolution

The PTA considers that there must be an allowance for Site-specific Risk Assessment when determining if an excavated material poses an unacceptable risk of harm to the environment or human health and therefore if the material is fit for purpose and suitable for use.

This can be achieved by amending the Waste Definitions to include a definition for 'Excavated Reusable Material' in addition to the proposed definitions of Clean Fill and Uncontaminated Fill. A proposed definition for Excavated Reusable Material is provided below.

Excavated Reusable Material means excavated material that is not Clean Fill or Uncontaminated Fill, but can be demonstrated to the satisfaction of the Chief Executive Officer to not pose a risk of harm to the environment or human health, as determined by sampling and testing carried out in accordance with the requirements set out in Table [X] and a Site-specific Risk Assessment.

2 No provision to reuse treated acid sulfate soil

Linking the definition of Uncontaminated Fill to inert waste type 1 means that any acid sulfate soil, even if managed, treated and validated in accordance with DWER guidelines, does not meet the definition of Uncontaminated Fill.

This would result in large volumes of material excavated from the below the water table on the Swan Coastal Plain and in other parts of Western Australia requiring disposal at a licenced landfill. This position is contradictory to the widely accepted view, as referenced in DWER's guidelines, that treated acid sulfate soils do not pose an unacceptable risk of harm to the environment or human health and therefore are suitable for use in a range of land development applications.

Resolution

The PTA considers that any acid sulfate soil which is managed, treated and validated in accordance with DWER guidelines must meet the definition of Uncontaminated Fill.

This can be achieved by amending the Waste Definitions to clarify that inert waste type 1 includes any acid sulfate soil which is managed, treated and validated in accordance with DWER guidelines.

3 Uncontaminated Fill thresholds above standard laboratory detection limits

To enable practical implementation of the proposed amendments, the maximum concentrations (thresholds) for Uncontaminated Fill for all chemical substances must be above standard laboratory detection limits. For example, trace level analysis is required to meet the thresholds for a number of the chemical substances including pesticides.

Resolution

A detailed, independent review of the proposed maximum concentrations (thresholds) for Uncontaminated Fill should be undertaken to ensure that the thresholds will not be routinely exceeded as a result of being close to or above laboratory detection limits.

4 Uncontaminated Fill thresholds below ambient levels

To enable practical implementation of the proposed amendments and to avoid disposing of large volumes of material to landfill, the maximum concentrations (thresholds) for Uncontaminated Fill for all chemical substances must be above ambient levels which are already present in the environment. For example, the originally proposed soil leachate criteria for PFOS + PFHxS of <0.001 micrograms per litre is routinely exceeded in areas which have no historical association with the use of PFAS.

Resolution

A detailed, independent review of the proposed maximum concentrations (thresholds) for Uncontaminated Fill should be undertaken to ensure that the thresholds will not be routinely exceeded as a result of being close to or above ambient levels which are already present in the environment.

5 Uncontaminated Fill thresholds inconsistent with waste thresholds

To enable practical implementation of the proposed amendments, the maximum concentrations (thresholds) for Uncontaminated Fill for all chemical substances must be considerate of, and consistent with, the existing thresholds for inert waste type 1. For example, the threshold for Arsenic in Uncontaminated Fill is 20 milligrams per kilogram which is greater the landfill disposal threshold for Arsenic of 14 milligrams per kilogram. Another example is Benzene.

Resolution

A detailed, independent review of the proposed maximum concentrations (thresholds) for Uncontaminated Fill should be undertaken to ensure that the thresholds are considerate of, and consistent with, the existing thresholds for inert waste type 1.

6 Lack of implementation guidance

The PTA considers that supporting guidance must be developed and released in parallel with the proposed amendments to provide certainty to generators and receivers of Uncontaminated Fill.

Resolution

Supporting guidance is developed to provide clarity on the following items:

1. Sites that receive multiple material types
2. Leachate testing method
3. Testing requirements
4. Results that marginally exceed thresholds
5. Roles and responsibilities
6. Source data

Sites that receive multiple material types

It should be clarified if sites are able to receive both Clean Fill/Uncontaminated Fill and waste and if so, the associated licencing requirements and landfill levy obligations.

Leachate testing method

The type of leaching agent which is to be used for ASLP testing (i.e. deionised water vs acetic acid) for Uncontaminated Fill assessment should be clarified.

Testing requirements

It should be clarified if some or all chemical substances must be tested in order to determine if a material meets the definition of Uncontaminated Fill. The PTA considers that the testing regime should only include contaminants of potential concern based on the source of the material.

Results that marginally exceed thresholds

The process for assessing material in which one or more of the chemical substances exceed the maximum concentrations (thresholds) for Uncontaminated Fill should be clarified. For example, could material be Uncontaminated Fill if one test result of 100 is greater than a threshold?

The PTA considers that a statistical approach is warranted to ensure that material which does not pose an unacceptable risk of harm to the environment or human health and is therefore suitable for use in a range of land development applications is not disposed of to landfill due to one or more results exceeding the threshold.

Roles and responsibilities

Guidance should be provided which clearly articulates the roles and responsibilities of the relevant stakeholders including DWER's regulatory role. For example, is there a requirement for DWER to verify assessments which determine that a material meets the definition of Uncontaminated Fill?

Source data

Guidance should be provided which clearly states how the maximum concentrations (thresholds) for Uncontaminated Fill for all chemical substances were derived. This is important to ensure the currency of the thresholds and to allow the thresholds to be updated in the event that there are changes to the criteria upon which the thresholds are based.

Thank you for the opportunity to comment on the proposed amendments.

Yours sincerely



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