

28 August 2014



End of Waste Review
Department of Environmental Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850

Dear Sir/Madam

Draft Guidance Statement: Regulating the Use of Waste-Derived Materials

Thank you for the opportunity to provide a submission towards the Draft Guidance Statement.

The Peel-Harvey Catchment Council is the peak community organisation working with government and non-government groups for a healthy environment in the Peel-Harvey Catchment. The Peel-Harvey Region, under the auspices of the PHCC, has also recently become an independent Natural Resource Management (NRM) region.

Our submission relates generally to the issues raised in the Consultation Paper and Guidance Statement with a particular focus on the regulation of soil amendments/conditioners. We also include specific comments on the need for stronger policy and legislative support for the re-use of by-products and 'wastes'.

Background to our submission

The use of Waste Derived Materials (WDM) is an important NRM issue in the Peel-Harvey Region, especially given the potential environmental and economic benefits of use of soil amendments/conditioners in our catchment. Large areas in the Catchment are also used to stockpile by-products from the processing of bauxite, sterilising land and possibly creating long-term environmental issues.

Modelling by the Department of Water shows that the use of soil amendments on the Catchment's high nutrient-leaching soils would achieve 68% of the water quality improvement target for the Peel-Harvey Estuarine System (phosphorus reduction of 48.5 tonnes of phosphorus, 71 tonnes reduction required in total) (Kelsey *et al*, 2011). Work by the Department of Agriculture and Food WA shows that application of soil amendments to the soils of the coastal plain catchment also brings a significant boost to pasture productivity. No other type of available action would have the same level of positive impact on water quality in the Peel-Harvey, and boost farm productivity at the same time.

Hence, the Peel-Harvey Catchment Council is keen to see the use of soil amendments expand in a manner which is:

- a) Supported by the community
- b) Safe for workers, users, and the public
- c) Safe for domestic and native animals
- d) Safe for the environment

and which will:

- e) Build community confidence and support for the use of such products
- f) Maximise other environmental, social and economic benefits.

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As you are aware, trialling the use of bauxite residue products as soil amendments has a long history in the Peel-Harvey Catchment. There is much to be learnt from this experience from a technical and public perception point-of-view.

A key learning has been that the Government's process of assessing and approving the products for use must be transparent, repeatable and include a high regard for public and environmental safety. This is required before the widespread use of soil amendments will be broadly accepted by government and the community. Such a sound and well supported process may not have occurred in the past.

Central to a transparent, repeatable and broadly accepted approval process:

1. The health and safety standards to be met by each WDM must be backed by expert advice and clearly articulated to the public
2. The evidence supporting the approval of a product must be peer-reviewed by suitably qualified experts in government (or experts directly answerable to government), and made publicly available
3. For products which are approved for a use, Government should have the confidence that the materials can be considered products in their own right.
4. There should be no perverse outcomes – such as the treatment of a resource mainly to gain a by-product.

Unfortunately, the Consultation Paper and the Draft Guidance Statement may not achieve these standards.

Our submission raises a number of Specific Comments, and is followed by direct answers to the questions posed in the Consultation Paper.

Specific Comments

1. The Guidance Statement is recognised as a positive, albeit immediate and interim measure to encourage the production and use of Waste Derived Products

The Peel-Harvey Catchment Council is very supportive of the Government's moves to encourage the production and use of Waste Derived Materials (WDM). We acknowledge the lack of regulation as one of the key barriers to greater re-use of by-products and wastes.

However, we recommend that the Draft Guidance Statement be revised in the context of a more proactive and positive Government policy & legislative framework which addresses broader 'waste' reduction objectives (broader than minimising waste to landfill - see Point 4 below). In line with this approach, the PHCC asserts that Government (including the DER) needs to refer to these materials as 'products' once they have met the necessary specifications, and not WDM. The Oxford dictionary definition of 'waste' is "Ill. Waste matter, refuse. 1. Refuse matter; the useless by-products of any industrial process"

This more proactive and positive Government policy & legislative framework will require a whole of government approach, and changes to legislation

2. A legislative approach to regulation of WDM is needed

The Draft Paper and Guidance Statement propose to regulate WDM through a minimalist, administrative approach (page 3, Consultation Paper). The PHCC does not support this approach and does not believe it will lead to a significant reduction in materials going to stockpiles and landfill, particularly by-products of mining processes.

A legislative approach, backed by a positive government policy, is required to give industry and the public the confidence that use of WDM is safe for the community and the environment. This would include provisions to licence products to be used in specified applications.

We have noted the examples of legislative approaches cited in the Consultation Paper (NSW, Victoria and South Australia) and draw the DER's attention to Queensland which has also adopted a legislative approach. Refer to the example of a General Beneficial Use Approval issued under the Queensland legislation for use of Coal Combustion Products (Attachment 1). We suggest this approach could be used as a model for adoption in local legislation.

We appreciate changes to legislation may take some time to enact, but suggest that this should be the long-term intent of Government and the Department. In the interim, preparation of Material Guidelines is a step in the right direction.

3. Creating products from wastes and by-products

A significant shortfall of the proposed framework is that it only clarifies that the WDM is not a waste under waste management legislation. This definition of a WDM 'in the negative' leaves the full nature of the approval open to interpretation, and the status of the material unclear (i.e. it is neither waste nor possibly a product under general consumer protection laws).

The PHCC believes the proposed regulatory framework, as proposed, is too passive, and may leave the community in doubt as to safety of the product and the rigor and transparency of the approval process. In this regard, the Draft Guidance Statement could be improved in the interim by showing through legal advice that WDM conforming to a Material Guideline will be subject to consumer protection laws applicable in Western Australia.

4. The Draft Guidance Statement should be revised in the context of a clear list of Government Policy objectives which guide the development of Material Guidelines

The Draft Guidance Statement does not provide a clear list of policy objectives to guide the regulation of WDM. Currently, the Objectives of the Guidance Statement are included throughout the 'Objectives' and 'Background' sections of the Guidance Statement and parts of the Consultation Paper. These should be consolidated into a single 'Objectives' section.

The PHCC also believes that the Objectives of the Draft Guidance Statement need to be broadened so that the objective is not only to reduce waste to landfill, but to also:

- reduce the alienation of land due to the stockpiling of mining and industrial by-products
- encourage the producers of by-products and 'wastes' to support research and trials and be prepared to release material for reuse under the established regulatory framework
- maximise the environmental benefits from use of the by-products.

It is the PHCC's view that the objectives of the Guidance Statement (and the broader Government policy agenda) should be for (not necessarily in priority order):

- a) A clear, transparent and efficient process for the regulation of waste-derived materials
- b) Protection of human health and safety
- c) Protection of the environment and natural resources
- d) Reduction of waste to landfill, in accordance with Government policy
- e) Reduction of land alienation due to the stockpiling of by-products from industrial and mining processes
- f) Encouragement to producers of by-products and 'wastes' to support research and trials and be prepared to release material for reuse under the established regulatory framework
- g) Maximising replacement of existing natural resource use
- h) Where possible, maximising sustainability outcomes (provide environmental, economic and/or social benefits) in addition to the above stated objectives.

5. The Draft Guidance Statement should provide high level statements of how environmental and human health protection is to be demonstrated by applicants

The Draft Guidance Statement only provides two (2) end-of-waste criteria, which will be used to determine the Material Guidelines and case-by-case determinations on WDM's.

These are:

- *“that the production and/or characteristics of the WDM meet all defined and relevant specifications or standards as evidenced through appropriate quality assurance/sampling and testing systems*
- *that the WDM will be used to replace a raw material and that use will not result in unacceptable impacts on the environment.”*

The PHCC believes that these criteria are insufficient to provide the overarching administrative or regulatory head-of-power to give our catchment community and general public the confidence that all applications will meet a high standard of human health and environmental protection.

It is also of concern that the two criteria do not refer to the ‘protection of human health’ even though this may be implicit in ‘appropriate assurance/sampling and testing standards’.

At a high-level, the Guidance Statement should describe in general terms, how applicants are to demonstrate that their products will meet the Objectives of the Guidance Statement, namely Objectives proposed in this submission above (listed in Point 4 above) including human health and safety and environmental protection standards to the satisfaction of the relevant Government agencies.

Whilst it is acknowledged that the detailed standards to be met for human health and environmental protection are too numerous and vary amongst products to be included in the Guidance Statement, there should at least be a description of the matters that will be assessed by the relevant agency. These include (but are not limited to):

- Chemical toxicity (and bioavailability)
- Radioactivity
- Volatility and flammability
- Stability and bioavailability.

The inclusion of this general statement on how human health standards and environmental protection standards are to be demonstrated is important to our community to provide the confidence that their health and safety, and that of the environment, are the primary concerns of any WDM initiative.

6. Material Guidelines should be for specific materials (not categories of materials)

The PHCC does not support the preparation of Material Guidelines for categories of WDM as explained on Page 4 of the Consultation Paper. Instead, we suggest a direct approach where Material Guidelines are produced for each WDM, bypassing the need for general Material Guidelines for each category of WDM. (e.g. a Material Guideline would be prepared for a specific bauxite residue product, rather than producing a general Material Guideline for soil conditioners possibly supported by a Material Guideline for each soil conditioner WDM product).

The preparation of general Material Guidelines for categories of materials adds another layer of administration and time delay to the approvals process. The preparation of Material Guidelines for specific WDM cannot be avoided, at least for soil conditioner WDMs, as there is a wide variety of waste derived resources which can be used for this purpose, each with their own particular characteristics, benefits and risks.

In terms of soil conditioner products derived from mining and industrial processes, the PHCC believes that the public would expect an approval which is specific to the WDM. This is confirmed in other jurisdictions (e.g. Queensland, Approval for Coal Combustion Products under the Waste Reduction and Recycling Act 2011).

7. The regulation framework proposed in the Guidance Statement should be amended to clearly provide a one-stop-shop approval for products

The regulatory framework should be amended to clearly state that the approval issued by the DER encompasses an assessment by the Department of Health to confirm that Material Guidelines meet acceptable levels of public health and safety. In effect, the DER's approval should be the one-stop shop for applicants.

8. The regulation of waste derived materials should be driven (and prioritised) not only by the diversion of materials from landfill but also the use of by-products from mining and industrial products, the avoidance of stock-piling and the avoidance of raw-material use

Whilst the PHCC generally supports the priorities for production of Material Guidelines included on Page 4, it recommends that the priorities be driven by not only the diversion of waste from landfill, but also the use of by-products from mining and industrial products, the avoidance of stock-piling and the avoidance of raw-material use. In general, the regulatory process should be driven by how significantly a WDM meets the objectives of the Guidance Statement (listed in Point 4 above).

9. The PHCC is concerned that the process of preparing Material Guidelines for different products will be constrained by limited resources within the DER

The PHCC understands that limited resources are available within Government but does not accept that a 'subject to resources' qualification should be included in the Guidance Statement (page 9, Guidance Statement section). This qualification should be removed. It could be replaced by a statement to the effect of:

"Decisions to progress the development of a Material Guideline or give an approval will be made by the DER in consultation with the applicant (or applicant group/industry group where the material is produced by more than one entity)".

Responses to consultation questions

Question 1: a) The DER should develop material guidelines for:

- bauxite-derived by-products
- other mining and industrial products with potential for use as soil conditioners
- waste-derived fill
- construction products
- organic based soil conditioners
- treated acid sulphate soils

Question 1 b): The priority for development of Material Guidelines should be as follows:

1. Bauxite-residue mud (e.g. Alkaloam®) – as this material has had extensive research and testing for use as a soil amendment and is likely to significantly improve the condition of the Peel-Harvey Catchment (environmentally and economically). There are also significant stockpiles of this material within, and in proximity to, the Peel-Harvey Catchment
2. Waste derived fill products, such as bauxite derived sand products, as these products have also undergone considerable research and testing, and will significantly reduce the need to access raw resources, and in turn reduce the clearing of native vegetation
3. Other soil conditioner products with potential for use in broadscale applications, where considerable research and testing has occurred.

Question 2 a) Yes, the Peel-Harvey Catchment Council is willing to participate in workshops to inform the development of Material Guidelines.

Question 2 b): We are able to be involved in workshops for soil conditioner products that have potential to be used in broadscale agricultural applications, and waste-derived fill products. We would also like to be kept informed of workshops for all other WDM categories.

Question 3) The Peel-Harvey Catchment Council does not have a strict policy on how Government should recoup the costs of regulation, where the regulation is to achieve a public policy aim. In regard to the regulation of WDM, the PHCC believes that fees should not be a disincentive to industry to develop WDM products for market. Fees for regulation of WDM should take into account that there are several, significant public goods that can be derived from re-using wastes and by-products. A modest sliding fee approach may be appropriate, with different set fees for different categories of materials to reflect the degree of work involved. Fees should be set in consultation with industry to ensure that they are not a disincentive to commercialisation of WDM products. Thank you again for the opportunity to comment. Please do not hesitate to contact me if you require any clarification or would like to discuss our comments.

Yours sincerely



Jan Star AM
Chairman

Enclosed: Queensland legislation for use of Coal Combustion Products

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