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5 March 2018

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Dear Nick

Waikato Regional Council Submission to the draft Guidelines for Beneficial Use of Organic Materials on Productive Land

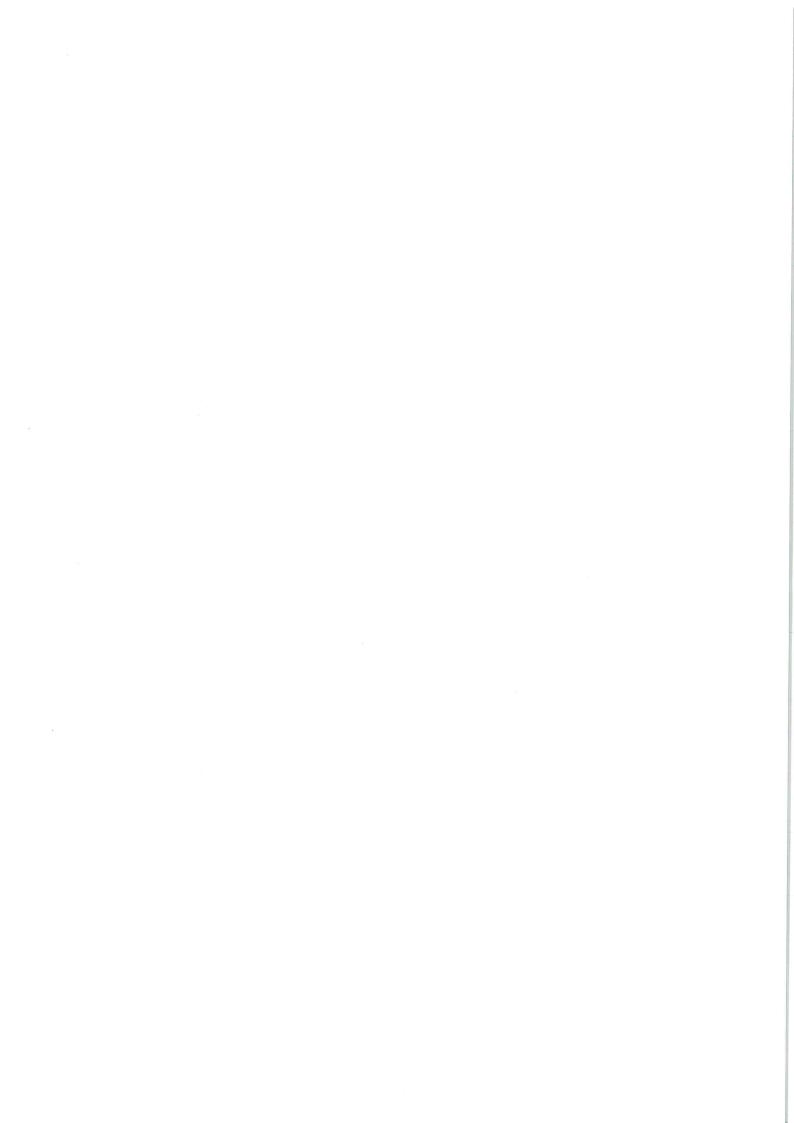
Thank you for the opportunity to make a submission on the "draft Guidelines for Beneficial Use of Organic Materials on Productive Land (December 2017 version)" consultation document. Attached is Waikato Regional Council's submission regarding this document. Please note this is a staff submission which has not been formally endorsed by Council. Waikato Regional Council looks forward to being involved in further discussion regarding the development of the document.

Should you have any queries regarding the content of this document please contact Jonathan Caldwell on (07) 859 0999 or by email at jonathan.caldwell@waikatoregion.govt.nz.

Yours sincerely,

Tracey May

Director Science and Strategy



SUBMISSION ON THE DRAFT GUIDELINES FOR BENEFICIAL USE OF ORGANIC MATERIALS ON PRODUCTIVE LAND

TO:

Water New Zealand

P O Box 1316

WELLINGTON 6140

FROM:

Waikato Regional Council

Private Bag 3038 Waikato Mail Centre Hamilton 3240

INTRODUCTION

Waikato Regional Council (WRC) appreciates the opportunity to comment on the draft Guidelines for Beneficial Use of Organic Materials on Productive Land.

We would like to acknowledge the time and effort that the Project Steering Group and the technical experts have dedicated to the preparation of this document.

Our submission follows on from a submission made in March 2017 relating to an earlier 2016 draft of this Guide (Waikato Regional Council document reference 10007973).

In summary, the changes proposed for this Guide do not satisfy WRC's original concern regarding the earlier draft proposals on metal limits for classifying organic material as compliant for application to land as a soil fertiliser/soil conditioner.

The following provides more detailed discussion of our concern about these metal limits as well as additional comments and recommendations we have regarding this latest draft of the Guide.

DISCUSSION OF CONCERNS

Section 1.1.2 Exclusions (page 1)

The underlined phrase "or soil conditioners" from the italicised paragraph below is confusing as it seems contradictory to the earlier Inclusions section on page 1 which describes the soil conditioning properties of organic materials. It is assumed that what this is referring to is non-organic/inorganic soil conditioners such as gypsum for example. It would be useful if some of these terms, including non-organic soils (e.g. does this refer to all soils other than organic/peat soils?) were defined/ examples provided.

This Guide does not apply to home products for self-use, nor does it apply to liquid seaweed products, non-organic mulches, non-organic soils <u>or soil conditioners</u> and non-compostable materials e.g. plastics. However management principles within this guide may be usefully adapted to the home environment.

Section 1.2 Soil Replacement Requirements (page 2)

WRC notes that the Guide does not apply to situations where organic material is being used specifically as a soil replacement. Firstly, it would be useful to have a definition of what is meant by "use of organic material as a soil replacement" versus use of "organic material as a soil fertiliser/conditioner". It is

assumed that soil replacement includes situations where the landowner is wanting to infill gully areas or raise the level of existing ground rather than improving the fertility of the underlying soil and is using organic material/waste to do this in a similar manner that cleanfill might be disposed of to land.

Irrespective of the definition of "use of organic material as a soil replacement" WRC agrees with the recommendation made by the Guide under this section that the application of the Ecological Soil Guideline Values (Eco-SGVs) are most relevant for situations where organic material is being applied as a soil replacement in rural and urban environments (in addition to any NES requirements) with the exception that for urban environments that the appropriate limit for zinc should be 300 ppm. WRC also agrees with the recommendation that in the absence of any New Zealand specific Eco-SGVs for mercury and nickel that 1 ppm and 60 ppm should apply respectively.

In addition to this it is noted that under this section Eco-SGV is incorrectly referred to as Eco-SQV under the urban environment bullet point. Likewise, the same error is also noted under section 9.7 on page 51.

Section 5.1.3.2 Contaminant Limits (page 22 to 23)

The proposed product contaminant concentration limits for metals in situations where organic material is being applied to existing soils as a fertiliser and or conditioning agent are specified in Table 5.5 and are the same as the 2003 Biosolids "b" grade metal limits.

As per WRC's previous submission in March 2017, these contaminant metal limits are too high as there is potential for contaminants to remain above the relevant guidelines for protection of ecological receptors even after mixing with the underlying soils. WRC's view is that application of organic materials to land on the basis of these proposed limits could pose an unacceptable risk to the environment and could restrict future land use as a result of land being classified as contaminated.

Section 3.1 Overview of Requirements

While the Guide supports the delivery of one of WRC's Waste Strategy goals which is to encourage resource efficiency and beneficial reuse that create sustainable, economic growth, it is important to note that the other main goal of WRC's Waste Strategy is to protect our communities, land, water and air from harmful and hazardous wastes.

The Guide proposes that the discharge of organic material to land where contaminant levels meet the 2003 Biosolids "b" grade metal limits should be allowed as a permitted activity. WRC has concern about the Guide proposing that this should be allowed as a permitted activity as it could create confusion and at worst result in the contamination of land. For example:

- A landowner or contractor may decide on the basis of the Guide that they can apply organic
 material to land as a permitted activity because the contaminant levels meet the proposed metal
 limits without first checking with their Regional Council. It is important they meet the regional
 plan requirements which in many cases may not meet the criteria for being accepted as a
 permitted activity.
- A regional council undertaking a plan review, might decide to make this activity permitted under their plan purely on the basis that there is a national Guide available that proposes that this sort of activity should be permitted without undertaking their own assessment.

 Application of organic materials to land on the basis of these proposed limits could pose an unacceptable risk to the environment and could restrict future land use as a result of land having to be classified as contaminated.

Under Waikato Regional Council's current Regional Plan, such a discharge would be treated as a discretionary activity requiring resource consent. Waikato Regional Council's Regional Policy Statement, Policy 14.3 (Soil Contaminants) requires WRC to:

Ensure that **contaminants** in soils are minimised and do not cause a reduction in the range of existing and foreseeable uses of the soil resource. Particular attention will be given to the potential for effects on:

- a) human health
- b) animal health
- c) suitability of soil for food production
- d) micro-nutrient availability
- e) soil ecology
- f) groundwater.

Implementation method 14.3.1 (Control discharges to land) of the RPS requires that:

"Regional plans shall control discharges to land to ensure the accumulation of soil contaminants does not reduce the range of existing and foreseeable uses of the soil resource.

For key soil contaminants including cadmium, fluorine and zinc, Waikato Regional Council will consider:

- a) adopting risk-based guidelines for contaminants in soil and linking these with specific management actions.
- b) establishing processes to determine discharge limits which may include setting maximum discharge limits based on soil contaminant levels".

Based on this high level RPS direction, WRC would not be in a position to align the Waikato Regional plan rules with some of the metal limits proposed under these proposed guidelines. We consider it is inappropriate to have such a lenient national Guide having a permitted activity for such an activity.

It is also noted that the proposed nitrogen limit of 200 kg/ha/yr for application of organic material to land is out of alignment with WRC's permitted activity limit of 150 kg/ha/yr under the current Regional Plan. In addition to this it is worth pointing out that the currently Proposed Plan Change 1 which applies to the Waikato and Waipa catchments has a strong emphasis on reducing nitrogen discharges to these catchments and therefore provides a strong signal that existing rules for nitrogen loading limits to land are unlikely to be increased in future.

Section 9.7 Soil Replacement Requirements (page 51 to 52)

Table 9.2 summarises the proposed soil replacement metal limits (i.e. based on Eco-SGVs) to the Guide product metal limits from Table 5.5. WRC recommends that the cadmium limit of 3.1 mg/kg proposed for organic material used as a soil replacement be changed to the 1.5 mg/kg Eco-SGV that accounts for bioaccumulation. This limit is considered more relevant and more in keeping with the NES residential

produce soil standard of 3 mg/kg and also the upper threshold of 1.8 mg/kg recommended under the Tiered Fertiliser Management System.

SUMMARY

Overall, WRC supports the main intent of this Good Practice Guide, which is to promote a more consistent approach throughout New Zealand to the management and benefit from using organic materials and derived organic products as fertiliser and/or conditioning agents for existing soils.

However, as discussed above, the Guide does not satisfy WRC's original concern regarding the earlier draft proposals on metal limits for classifying organic material as compliant for application to land as a soil fertiliser/ soil conditioner. WRC's view is that application of organic materials to land on the basis of these proposed limits could pose an unacceptable risk to the environment and could restrict future land use as a result of land having to be classified as contaminated. Further to this, the proposal made by the Guide that application of organic material meeting the 2003 Biosolids "b" grade metal limits should be allowed as a permitted activity is potentially confusing and could result in misinterpretation by landowners and or contractors.