

Draft Good Practice Guide for the Beneficial Use of Organic Waste Products on Land

Submission by WasteMINZ Organic Materials Steering Group

27 March 2017

1. The Organics Materials Steering Group (OMSG) acknowledges and commends the pragmatic and enabling approach that has been undertaken in the development of the proposed guidelines. The OMSG embraces this approach and views this as a significant positive step forward from the current 2003 Guidelines, specifically determining application rates for agriculture on the basis of nitrogen content and soil/crop requirements.
2. This approach recognises the agronomic value of organic materials and the benefit these have to future proofing our soils vs current heavy reliance on chemical fertilisers.

Compost Standard NZS4454:2005

3. The Compost Standards NZS 4454:2005 is a key standard underpinning safe and beneficial use of organic materials. It makes direct reference to the 2003 Biosolids Guidelines, specifically the contaminant limits for soil and products that can be applied to soil.
4. It therefore follows that because the proposed guideline will supersede the 2003 Biosolids Guidelines that this does not undermine the relevance, effectiveness and continued use of Compost Standard NZS4454.
5. Compost Standard NZ4454 covers organic materials applied to soil that includes composts and compost blends used as a complete soil substitute (e.g a garden mix). NZ4454 compliant composts are distributed to both the agricultural and urban market whereas a soil substitute product is typically sold in bags and bulk to the home garden market, not agriculture.
6. The proposed draft guideline for soil limits is focused on agricultural soils only. This presents a problem for the continued relevance and use of the NZ4454 Standard which covers both agricultural and urban soils.
7. The OMSG believed the problem would be resolved if the proposed guidelines adopt the following:
 - a. **Agricultural soils.** Continue with the current approach, basing application rates on agronomic nitrogen loading in combination with product contaminant limit.

- b. **Urban soils.** Adopt the same soil limits and product “Grade a” (up to 2012) for metals presented in Table 4.2 of the 2003 Guidelines as follows:

Parameter	Soil limit or ceiling concentration for products used as soil replacements (mg/kg dry weight)	Grade a max. concentration (mg/kg dry weight)
Arsenic	20	20
Cadmium	1	3
Chromium	600	600
Copper	100	300
Lead	300	300
Mercury	1	2
Nickel	60	60
Zinc	300	600

8. The basis for adopting the same soil limits and product “Grade a” limits is also supported by the natural levels found in materials that should be able to be safely applied to land. The table below compares these levels. The main concern is that urban soil zinc level is too low and will negatively impact on soil replacements made from compost blends compared to the 2003 guidelines.

Product	As	Cd	Cr	Cu	Ni	Pb	Zn
<i>Green & food waste</i>	14	1.1	30	56	37	100	280
<i>Chicken manure</i>	26	0.06	23	43	6	6	295
<i>Pig manure</i>	1	0.06	2	49	2	2	580
<i>Horse manure</i>	3	0.02	6	13	3	8	87
<i>Sheep pellets</i>	3	0.10	9	22	4	17	140
<i>Mushroom compost</i>	36	0.08	8	94	6	10	270
<i>Biosolids Guidelines (soil limits post 2012)</i>	20	1.0	600	100	60	300	300
<i>Proposed limits for urban soils in proposed guidelines.</i>	60	12-17	390	150, 270, 360		1300	200, (sensitive soil) 240, (typical soil) 270 (tolerant soil)
<i>Proposed limits for agricultural soils in proposed guidelines.</i>	20	1.5-3.1	300	130, 150, 190		530	130, (sensitive soil) 190, (typical soil) 265, (tolerant soil)

Title of guidelines

9. The proposed guideline is titled “*Good Practice Guide for the Beneficial Use of Organic Waste Products on Land.*” It is proposed that the word ‘waste’ is replaced with ‘materials’
10. By way of background the OMSG went through a similar exercise when determining a name for itself – The Organic Waste Steering Group or Organic Materials Steering Group.
11. Use of ‘waste’ unnecessarily gives a negative impression at a time when there is a desire from both central and local government, including the Ministry for the Environment to see organic materials diverted from landfill and beneficially used as a resource.
12. The OMSG acknowledges that there is argument to label materials that fall outside the scope of the proposed guideline / Compost Standard NZ4454 to be referred to as ‘waste’. However, these should not determine how we view and label the significant volume of organic materials that is currently being recycled and beneficially used in New Zealand.