

## Summary of submissions received during consultation on the draft Compost Guidelines (2012)

A total of three submissions were received during consultation on the 2012 draft Compost Guidelines. All submissions were received from licensed operators seeking clarification on specific sections of the guideline. The submissions were overwhelmingly supportive of the finalisation and publication of the compost guideline.

### Submissions received on each part of the guideline

Part	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Introduction	-	-	2
Siting of compost works	-	-	1
Design of composting facilities	-	-	3
Incoming feedstocks	-	-	3
Quality assurance	-	-	6
Product labelling	-	-	-
Environmental factors	-	1	2
Records maintenance	1	-	-
Closure of composting facilities	1	-	-

### General

The compost industry is well established and recognised within South Australia which supports 34 licensed compost facilities. Where composting is undertaken in excess of 200 tonne per annum, the facility is required to be licensed in accordance with section 36 of the Environment Protection Act 1993 (EP Act) for Schedule 1—Prescribed activities of environmental significance.

The EPA will use the compost guideline:

- as the basis for preparing comment or direction on development applications for proposed composting facilities under the *Development Act 1993*
- when making regulatory decisions under the EP Act relating to composting works.

The guideline recognises that existing and proposed composting facilities are each subject to a different suite of individual site-specific circumstances. The guideline sets the accepted standard for the design, construction, operation and closure of composting facilities. In applying the guideline, the EPA will take into account the specific facts surrounding the proposed or existing composting facility.

Use of this guideline by the EPA will assist in maintaining consistent minimum environmental standards appropriate for particular site circumstances.

## Introduction

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Purpose	-	-	-
Scope	-	-	2
How the EPA will use this guideline	-	-	-
Regulatory & technical basis for guideline	-	-	

One comment requested that the scope of the guideline include all forms or hybrids of composting, including forced aeration and in-vessel composting. The EPA has amended the guideline to include reference to these forms of composting.

One comment sought the incorporation of direct application of manure to land and the direct application of mulch to land within the compost guideline. The EPA addressed these comments in response to the draft 2007 compost guidelines. The position of the EPA is consistent with our previous stated position:

The Guideline has been developed to address requirements for activities that require an environmental authorisation as defined in Schedule 1, Part A 6(3) of the Act:

Composting works: the conduct of works at which mushroom or other compost is produced or is capable of being produced at a rate exceeding 200 tonnes per year.

The compost guideline has been developed for composting works and not the direct application of manures to land. In the *Standard for the production and use of waste derived soil enhancer*, Table 2 Guidance on use of solid and semi-solid organic wastes provide guidance on the direct application of manures to land. In addition, clause 17 of the Environment Protection (Water Quality) Policy 2003 prohibits the discharge of listed pollutants, which includes waste, into any water or onto any land where it is reasonably likely to enter into waters.

One comment queried why reference to biosolids management was included in section 5 Quality assurance where the scope of the compost guideline has excluded biosolids. The scope does not exclude biosolids, however where biosolids and or their sludges are used as a feedstock in the production of compost, reference must be made to the requirements specified in the *South Australian Biosolids Guideline for the safe handling and reuse of biosolid* (EPA 2009).

## Siting of compost works

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Siting of compost works	-	-	1

One comment stated that 'on-site management practices should have some scope for flexibility if the size of the compost works allows for a greater separation distance. Consideration should also be given to urban location versus rural/regional site'. The EPA will consider these factors when assessing new, or an expansion to an existing, application for composting works.

## Design of composting facilities

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Windrow	-	-	1
Wastewater management system	-	-	1
Stormwater	-	-	1

One comment stated that consideration should be given to alternatives to clay liners. The EPA will certainly consider alternatives to constructed clay liners provided there is a demonstrated equivalence in permeability performance. The recommended design specifications for the construction of a compost liner, as detailed in Appendix 2 of the compost guideline, make a specific recommendation to alternative liners.

The EPA will consider geosynthetic clay (GCL) liners as an example, where they demonstrate an equivalent, or higher, permeability performance to clay. Similarly, marl has been used in the construction of compost liners where it has been available on site and demonstrated to meet the performance criteria as detailed in Appendix 3 of the compost guideline. The EPA will work with licensees in developing acceptable solutions.

One comment requested clarification regarding 'stormwater management system capable of removing sediments and nutrients in runoff from finished compost product area'. There is a risk that concentrated stockpiles of finished compost may contain increased levels of nutrients, thereby increasing the risk of contamination to surface and groundwater. To address this potential risk, the EPA recommends that wastewater from these areas be directed through reed-beds or other simple systems which can effectively remove nutrients from water, prior to discharge offsite. The EPA does not require finished compost stockpile areas to direct wastewater to the wastewater lagoon. It is important to consider simple design solutions and site layout during the development phase to assist in minimising construction costs.

One comment sought consideration to the variance in climatic conditions across the state in relation to the design of wastewater lagoons. These considerations are built into the risk matrix that is applied when determining the design criteria for waste water lagoons, as detailed in Appendix 4.

## Incoming feedstocks

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Incoming feedstocks	-	-	3

One comment requested a more generic classification for Category A feedstocks, suggesting waste fill. Waste fill, as defined in the *Environment Protection Regulations 2009* means waste consisting of clay, concrete, rock, sand, soil or other inert mineralogical matter in pieces not exceeding 100 millimetres in length and containing chemical substances in concentrations (calculated in a manner determined by the Authority) less than the concentrations for those substances set out in the *Environment Protection Regulations, 2009*. The EPA considers the adoption of such a classification to be too restrictive, as many acceptable compost feedstocks do not meet the physical criteria for waste fill (eg grease trap waste, animal manure, straw).

Two comments queried the requirement to incorporate feedstocks such as untreated timber and pallets, and sawdust in the compost windrow within 48 hours of receipt to avoid the generation of odour, as detailed in Table 1 of the guideline. The EPA agrees that the feedstocks mentioned are not subject to rapid biological degradation and therefore should not

be subject to a 48-hour timeframe for incorporation into the windrow. The EPA has therefore amended Table 1 of the guideline to specify:

Feedstocks should be incorporated into the windrow upon receipt at the compost site, (or if not practicable, within 48 hours of receipt) so as to avoid the generation of odour (excluding untreated timber, pallets and other feedstocks that are not subject to rapid decomposition).

There is still a requirement to manage all incoming feedstock stockpiles to avoid potential nuisance impacts that may be caused by dust, fire and visual amenity. The EPA will direct licensees to the *Guideline for stockpile management: waste and waste derived products for recycling and reuse* (2010) where further clarification is required.

## Quality assurance

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Quality assurances	-	-	6

One comment requested clarification regarding the requirement to maintain a minimum of 55<sup>0</sup>C for three consecutive days in total or three consecutive days following each of the three turns. The guideline has been amended to remove confusion and specifies:

Compost facilities should be designed and operated to ensure that the whole mass of the windrow is subject to a minimum of three turns and the core temperature is maintained in excess of 55<sup>0</sup>C for three consecutive days following each turn to eliminate pathogens, weeds and seeds.

This requirement is consistent with Australian Standard AS4454–2012.

Another comment requested clarification regarding the scope for alternative methods and fewer turns to compost windrows that are proven under Australian Standard AS4454–2012. The EPA will assess proposals on a case-by-case basis consistent with the requirements specified in Australian Standard AS4454–2012 Appendix M.

Clarification was sought regarding the frequency of testing and the batch size of finished compost products. The EPA will work with licensees to determine appropriate testing frequency for finished compost and the batch size. These factors will be site specific and vary depending on factors such as type and volume of feedstocks received, composting processes employed onsite and history of product complaints.

Two comments sought clarification regarding the management of manures, animal wastes, food and grease trap wastes, querying why these feedstocks were not subject to the same requirements as biosolids, which is consistent with Australian Standard AS 4454–12. The guideline has been amended to specify:

Where compost windrows contain manure, animal waste, food or grease trap waste and biosolids and/or their sludges, the whole mass of the windrow should be subject to a minimum of five turns and the core temperature maintained in excess of 55<sup>0</sup>C for 15 consecutive days following each turn to eliminate pathogens, weeds and seeds.

One comment queried the requirement to store feedstocks, oversized materials, screened contaminants and finished compost products in separate designated areas, stating that such a requirement should be site specific. The EPA will consider this requirement, along with all elements of the guideline, on a site-specific basis. The principle of onsite segregation to avoid cross contamination is an important quality control requirement and as such the EPA does not propose to amend the guideline in this aspect.

## Product labelling

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Product labelling	-	-	-

One comment requested that recommended applications rates should not be included on product labelling as insurance does not cover this aspect. The recommendations of the compost guideline are outside the scope of insurance claims and the EPA considers application rates to be important and helps to guide consumers in their use of compost products. This is relevant as there are currently no restrictions on end-use application of compost specified within the compost guideline.

## Environmental factors

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Noise	-	-	1
Dust	-	-	1
Odour	-	1	-
Vectors	-	-	-
Litter	-	-	-

One comment queried the noise limits specified for general industry and rural zones. The indicative noise limits have been taken from the *Environment Protection (Noise) Policy 2007* and are not subject to variation within the compost guideline. The zoning given to a facility is determined by the relevant development plan as determined by council and therefore amendments to such zoning are outside the scope of the compost guideline.

One comment did not support the recommendation not to exceed two odour units at the site boundary, requesting the population-density based limits as detailed in the *EPA Guideline Odour assessment using odour source modelling (2007)* be referenced. In response, the EPA does not automatically require odour modelling to be implemented. This is usually determined as part of the development approval process, or in response to neighbouring nuisance complaints. The EPA does not consider modelling a substitute for best available technology and will consider factors such as complaint history, previous practical experience with composting, consultation outcomes, community odour diaries and surveys, and assessment of onsite management practices when determining acceptable odour limits, where applicable.

One comment requested that the sealing of vehicle moving areas should be site specific. The application of the compost guideline will be done on a site-specific, case-by-case basis. There may be circumstances where the sealing of internal roads is not necessary.

One comment queried why a section on fire and groundwater monitoring has not been included in the guideline. The EPA made the decision to exclude these parameters within the guideline at this stage, with intent of introducing these concepts during the next review of the guideline.

## Records maintenance

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Records maintenance	1	-	-

The one comment received in relation to this section of the guideline was supportive.

## Closure of composting facilities

Concept	No of supporting submissions	No of opposing submissions	No of submissions seeking clarification
Closure of composting facilities	1	-	-

The one comment received in relation to this section of the guideline was supportive.

## Appendices

Comments received in relation to the appendices have been included within the body of text above.