

Position statement on maximum contaminant levels in biowastes specifications for composting

This position statement outlines a range of measures that the Organics Recycling Group (ORG) of REA strongly recommends compost producers and their waste suppliers take to minimise problems arising from physical contaminants in feedstocks for composting.

A number of composters have informed the ORG that it is difficult and expensive to comply with PAS 100 all of the time because levels of physical contaminants have substantially increased in some local authority areas. In addition, our members report that the regulators are turning down some applications for spreading 'waste' status compost (non PAS 100) under the permitting system because it contains too many physical contaminants (most often residual plastics are the problem).

It is imperative that contaminants in feedstocks are tackled if we are to sustain and grow market demand for composted materials.

1. **Maximum acceptance levels in biowaste specifications (for tenders and contracts with local authorities)**

Contracts and tender documents for the collection, delivery and/or composting of source-segregated garden wastes or co-mingled food and garden wastes should include clear criteria for acceptance / rejection of loads delivered for composting.

This position statement specifies what the **maximum acceptance levels for physical contaminants, plastics and glass** should be in:

- collected source-segregated garden wastes, and
- collected source-segregated, co-mingled food and garden wastes,

to assist composting operations to meet the minimum quality criteria specified in PAS 100 specification for composted materials. These levels are shown in the table below.

Maximum acceptance levels in input material loads	
<u>Total physical contaminants</u> (includes paper, card, total plastics ¹ , light plastics, textiles, metals, glass, hardcore, rocks, tiles, ceramics, concrete, stones, nappies, dog droppings and other faecal matter and any other non-source-segregated or non-compostable input materials of any type other than those stated in this table)	MAX 2.0 % by weight (as received)
<u>Total plastics</u> (including high and low density plastics) ¹	MAX 0.24 % by weight (as received)²
<u>Light plastics</u> ³ (low density plastics e.g. plastic carrier bags)	Max 13 plastic bags / 10 tonnes of input material delivered See ORG Visual Assessment Guidance
<u>Glass</u> (including sharp and rounded pieces)	MAX 0 % by weight (as received)
Please refer to the ORG input specification template for a list of other types of incidental contaminants that should be included in the specification.	

The levels specified above should be used by local authorities, composters, and any procurement bodies when:

¹Non-compostable plastics, namely plastics that:

- do not have a valid certificate of compliance with standard BS EN 13432, BS EN 14995, ASTM D6400, ISO 17088, ISO 18606 or Vincotte's 'Program OK 2' criteria for 'home compostable' packaging/plastics;
- do not carry the appropriate certification mark authorised by the certification body that issued the final product's certificate; and
- do not carry the corresponding final product certification code issued by the certification body (e.g. if the certifier is DinCertco, final product codes begin with '7P', not '7W' as the 'W' denotes base material)

² This is double the limit level set for plastics in PAS 100 specification (0.12% by weight) and is based on feedback provided by ORG members. It assumes that approximately 50% of plastics will be removed through on-site picking and screening, while the remainder will be fragmented by shredding and will remain in the composting material and finished compost unless it is removed at the front end. Shredding creates a range of plastic fragment sizes, the larger ones being easier to remove using screening and on-site picking.

³ Light plastics' means low density, flexible plastics of any type and colour or transparency, excluding certified 'compostable' plastics.

1. **issuing new contracts, or revising existing contracts for the collection, delivery and/or composting of source-segregated garden wastes or co-mingled food and garden wastes; and**
2. **issuing tender invitation documents aimed at procuring collection, delivery and/or composting services of source-segregated garden wastes or co-mingled food and garden wastes.**

The [ORG input specification template](#) developed by the Organics Recycling Group (or an equivalent one containing the same or similar elements) should be referred to in tender documents and included in contracts for the collection, delivery and/or composting of source-segregated garden wastes or co-mingled food and garden wastes.

The contracts should clearly identify the responsibilities and actions that should be taken in the event that any of the above levels are exceeded.

Operators may want to specify maximum acceptance levels for other types of physical contaminants, as per table 2 on the ORG's Input Material Specification.

2. Banded charging mechanism based on input material quality

Contracts and tenders for awarding contracts should include a banded charging system that enables composters to charge additional fees based on the quality of the input materials delivered for composting. Additional charges should be based on:

- direct cost associated with the additional processing and reduction of contamination to acceptable levels;
- additional costs of processing and/or disposing of the contaminants;
- any ancillary cost such as transportation or labour costs;
- any cost associated with taking samples and assessing the levels of contaminants in the delivered load;
- any cost associated with storing the sampled, delivered load while the levels of contaminants are being assessed; and
- any cost associated with any agreed on-going monitoring (when this is required).

Table 3 of our [ORG input specification template](#) includes a suggested four tier charging system based on load quality and on the fate of the waste load.

Alternatively, incentives can be used to encourage waste suppliers to deliver cleaner feedstocks (e.g. gate fee discounts can be applied to clean input material loads).

3. Good dialogue and working relationship between organics contractors and their suppliers is essential

A good and effective working relationship between the waste supplier (e.g. local authority) and its waste contractor is absolute key to ensure physical contaminant issues are tackled (preferably at source).

A collaborative approach is imperative to ensure the Local Authority and the Contractor work closely to develop adequate specifications and comply with regulations and/or standards to supply quality compost. Both parties should be looking to improve quality as far as is reasonable practical within existing collection infrastructure and Local Authority's powers.

Composters:

Composters should work with their local authorities on appropriate input specifications and be prepared to either reject loads, or employ picking lines to remove contaminants up front at an additional cost, if this is required to achieve the required compost quality. Feedback provided by NAWDO to the ORG is that local authorities may be able to justify investing money in more education and communications to householders only if they had prior knowledge of the penalties that would ensue for not addressing contamination issues.

Accepting every load that arrives at the gate (no matter what the contamination levels are), and bidding for collection and composting tenders based on lax input specifications has created an expectation from local authorities that the composting industry can deal with contaminated loads at no additional cost. THIS IS NOT THE CASE! It has also created an uneven playing field amongst composters and has encouraged them to accept everything that is delivered to them, as they are less likely to lose a tender or a contract if they are more tolerant of poor quality inputs. All stakeholders in the supply chain (householders, waste suppliers and contractors) should work collectively to reverse this trend, however Local Authorities are the key to driving quality improvements in the supply chain.

Regular feedback on the quality of feedstocks delivered to the site should be provided to each waste supplier by the composter. Whenever the criteria specified in the contracts are not met, this should be clearly communicated to the waste supplier so that some effort can be put into tackling contamination.

The composter's staff on site should be made aware of the acceptance / rejection criteria, and be prepared to reject loads when they do not meet the agreed criteria and implement appropriate control measures.

Local Authorities:

Local authorities should not expect the composters to accept everything that arrives at their gates. Instead they should agree with their contractors an appropriate input material specification and appropriate charges based on the quality of the material delivered. Local authorities should also encourage contractors to provide feedback on the quality of the material delivered, and work with the contractor to address any contamination issues when these occur.

The ORG recommends that local authorities appoint a person who is responsible to deal with the Contractor in relation to issues associated with input material contamination. If it is not possible to employ a specific person for this role, this responsibility should be included in an existing employee's role with clear message that this new responsibility is an important one. Ideally quarterly site meetings should be held with the contractors for feedback purposes. In addition, local authority officers should be available to visit the site within an agreed timeframe for instances of contamination which are beyond the acceptable levels.

4. Conclusions

The inconsistency and inadequacy of input material specifications used in contracts and tenders has led to far too much poor quality feedstock being accepted and treated at biowaste management facilities. In addition, composters feel compelled to accept any loads from waste suppliers at no additional cost, which has created an uneven playing field and unfair competition between operators. In some circumstances unacceptable levels of contamination within the feedstock has led to the inability to produce compost of satisfactory quality and meet the PAS 100 specification.

In view of this, the Organics Recycling Group strongly encourages the composting industry to follow this Position Statement and to disseminate it to their waste suppliers and any other key stakeholders involved in the waste supply chain. Commitment to comply with this position statement by all is advantageous to ensure that:

- **all composters and/or collection contractors work to the same input material specification;**
- **all composters stop accepting and cleaning up loads that contain unacceptable levels of contaminants at no additional cost;**
- **waste suppliers appreciate more the impact that their decisions make on the operators' costs, the quality of the input materials and of the resulting outputs;**
- **a good working relationship is established between the waste supplier and the organics contractors to tackle physical contamination and to improve quality through effective communications and education to householders; and**
- **improving feedstock quality will not only potentially save local authorities money but also ensure that the receiving land bank and other markets for this material are secured for the foreseeable future.**