

## **Key changes brought in by the 2011 edition**

The composting of sewage sludge or its derivatives is no longer allowed. Addition of digestates from anaerobic and aerobic digestions processes is allowed, subject to restrictions set out in its scope and section on input materials. The composting process is allowed to utilise thermophilic aerobic digestion rather than aerobic composting for the sanitisation phase. Vermi-composting is within the scope of this PAS where it follows a sanitization step of thermophilic aerobic composting or thermophilic aerobic digestion.

A different method for laboratories to use when testing compost samples for E. coli as well as a clarified, separately published method for testing plant response to a compost sample and assessing its weed content.

All PAS 100 obligatory tests and corresponding limits apply to each compost grade for which PAS conformance is claimed, except in the case of the plant response and weeds test and minimum performance requirements which are allowed to be carried out on the principal compost grade only. (In the 2005 edition, additional compost grades only had to pass potentially toxic elements, physical contaminants, stones and stability tests if claimed to conform to PAS 100.)

Upper limits on physical contaminants, including plastic, have been made more stringent as too has the upper limit on stones in a mulch grade. Restrictions on sharps and the composter's responsibilities have been made clearer.

After validation, PAS 100:2011 recommends that graded compost batches that are sampled and tested are kept on-site until their test results have been received and evaluated, instead of requiring such keeping on-site. However, if compost sample test results are reported by the laboratory and evaluated by the composter after the sampled batch has been dispatched as PAS 100 compost and the test results show failure(s) to comply with any of the quality criteria, the composter is required to notify the customer and regulator of the nature of the batch's failure.

The composter is required to investigate the cause of any test result that shows failure to comply with any of the quality criteria. The composter must review whether the Quality Management System needs to be changed and, after implementing such change or taking other corrective action, the composter must sample further batches of the same compost grade and obtain laboratory test results for those samples. The composter must then use those results to evaluate whether the change to the QMS or the other corrective action taken was effective, i.e. resulted in compost that complies with the quality criteria. PAS 100:2011 also specifies options for the management of any failed batch (that is on-site when compost test results are received and evaluated).