

Project Brief:

Evaluate possible alternative area-based methods of assessment for plastics

Project Background

There has been a long-standing concern about the level of physical contaminants in certified composts and digestates. The level of plastic contamination has been a particular focus of regulators and the public. PAS 100 and PAS110 set limits for both the general levels of physical contaminants, particularly plastic contamination.

A 2015 WRAP investigation into plastics in compost and digestate identified a potential problem in the sensitivity of the test methodology (% mass of plastic/mass of compost or digestate) and the efficacy of using a 2mm separation criterion. The study suggested that these issues may result in inaccurate presentation of results for plastic contamination levels currently reported for composts and digestates in the UK.

Project Scope

Aim

This project aims to investigate whether the current mass-based analytical methods for determining physical contaminants levels on materials greater than 2mm are fit for purpose. Further, this project seeks to determine whether there are robust area-based methods available which might be applied to the determination of plastic contamination levels under PAS 100 and PAS 110.

Objectives

To fulfil this aim, the project's key objectives are as follows:

1. To assess the robustness of the current method for assessing plastic (physical contaminants) under PAS100 and PAS110
2. To consider whether and how an area-based method for quantifying plastic film in PAS100 compost and PAS110 digestate is operationally feasible and robust.

Methodology

- Examine whether the current test methods for compost and digestate physical contaminants analysis have a lower limit of detection for plastics that are at least compatible with the SEPA plastics limits.
- Investigate whether an area-based method for quantifying film plastics is operationally feasible and robust and whether it would be feasible to implement for PAS100 and PAS110 materials.

Project Deliverables

- Report investigating if an area-based method for quantifying plastic film provides robust evidence for future adoption in developing Standards and setting limits.