

# Guidance for Generators of Category AA, A, and B Compost and the Ontario Compost Quality Standards – Sharp Foreign Matter Effective July 1st, 2015

**Disclaimer:** This document provides operational guidance to accompany the “Ontario Compost Quality Standards” for generators of Category AA, A, and B Compost. The document does not supersede the Environmental Protection Act (EPA), O. Reg. 347 (including Part II in the “Ontario Compost Quality Standards”), or any site approval conditions. Ministry staff have full discretion on compliance actions required based on their knowledge and site specific conditions. If you wish to determine your legal obligations, you are advised to consult the EPA, O. Reg. 347, and Part II of the Ontario Quality Compost Standards and/or consult a lawyer.

**Note that a separate guidance document dealing with foreign matter has been developed for the industry.**

This document includes:

- What is considered sharp foreign matter?
- Standards for Sharp Foreign Matter and Compliance for Category AA and A Compost
- Re-testing for Sharp Foreign Matter in Category B Compost
- Analysis and Reporting Guidance
- Foreign Matter and Sharp Foreign Matter Schematic

Part IV of the Ontario Compost Quality Standards (Standards) sets out typical requirements for sampling compost. Appendix 1 in the Standards outlines the sample failure policy (re-testing) for metals and pathogens. However, Appendix 1 is silent on sharp foreign matter. This guidance document provides additional guidance on sharp foreign matter, including retesting considerations and determining sharp foreign matter.

## **1.0 What is considered sharp foreign matter?**

To support the assessment of sharp foreign matter, the ministry has been asked to provide further guidance on what would be considered sharp foreign matter.

Appendix 3 of the Standards defines Sharp Foreign Matter as:

*Any foreign matter that may cause damage or injury to humans and animals during or resulting from its intended use. Sharp foreign matter may consist of, but is not limited to, the following:*

- *metallic objects or pieces of metallic objects, for example,*
  - *utensils, fixtures, electrical wiring, pins, needles, staples, nails, bottle caps,*
- *or pieces of glass and porcelain, for example,*
  - *containers, dishes, glass panes, electric light bulbs and tubes mirrors*

The ministry has developed a Foreign Matter & Sharp Foreign Matter Schematic to assist with determining if a composite compost sample will pass the foreign matter & sharp foreign matter standards (see Section 1.4). This schematic provides additional language and identifies decision points to help guide the decision process when analysing compost results for foreign matter and sharp foreign matter.

Sometimes, determining sharp foreign matter can be difficult. In these instances, a facility should be prepared to show why they have concluded something is or is not sharp foreign matter. For example, some compost testing facilities use documented procedures to determine sharp foreign matter. As another example, an uncertain result could be checked and verified by a second technician or supervisor to confirm the determination is accurate and objective.

### **1.1 Standards for Sharp Foreign Matter and Compliance for Category AA and A Compost**

If the result from any Category AA or A compost sample fails to meet the Part II Standards for sharp foreign matter, the existing compost batch fails and no subsequent retesting is allowed at this point. The facility can decide whether to:

- [1] Take steps to remove the sharp foreign matter AND then sample again, or
- [2] Categorize the compost as Category B, if the requirements are met, or,
- [3] Classify the material appropriately and follow the appropriate regulations.

If a facility decides to further remove the sharp foreign matter and resample they should be able to demonstrate what steps were taken to promote the removal of the sharp foreign matter (e.g. rescreening with a smaller screen size). After reprocessing, a new composite sample should be taken to demonstrate the batch contains no sharp foreign matter. If the reprocessed compost batch remains segregated from any other material and has passed all other testing requirements, retesting for other parameters would be unnecessary.

### **1.2 Re-Testing for Sharp Foreign Matter in Category B Compost**

If the result from any compost sample does not meet the Category B standard for sharp foreign matter set out in Section 3.5, four (4) new composite samples from the batch should be taken for resampling. Note that the facility may use the duplicate sample for one of the subsequent 4 tests.

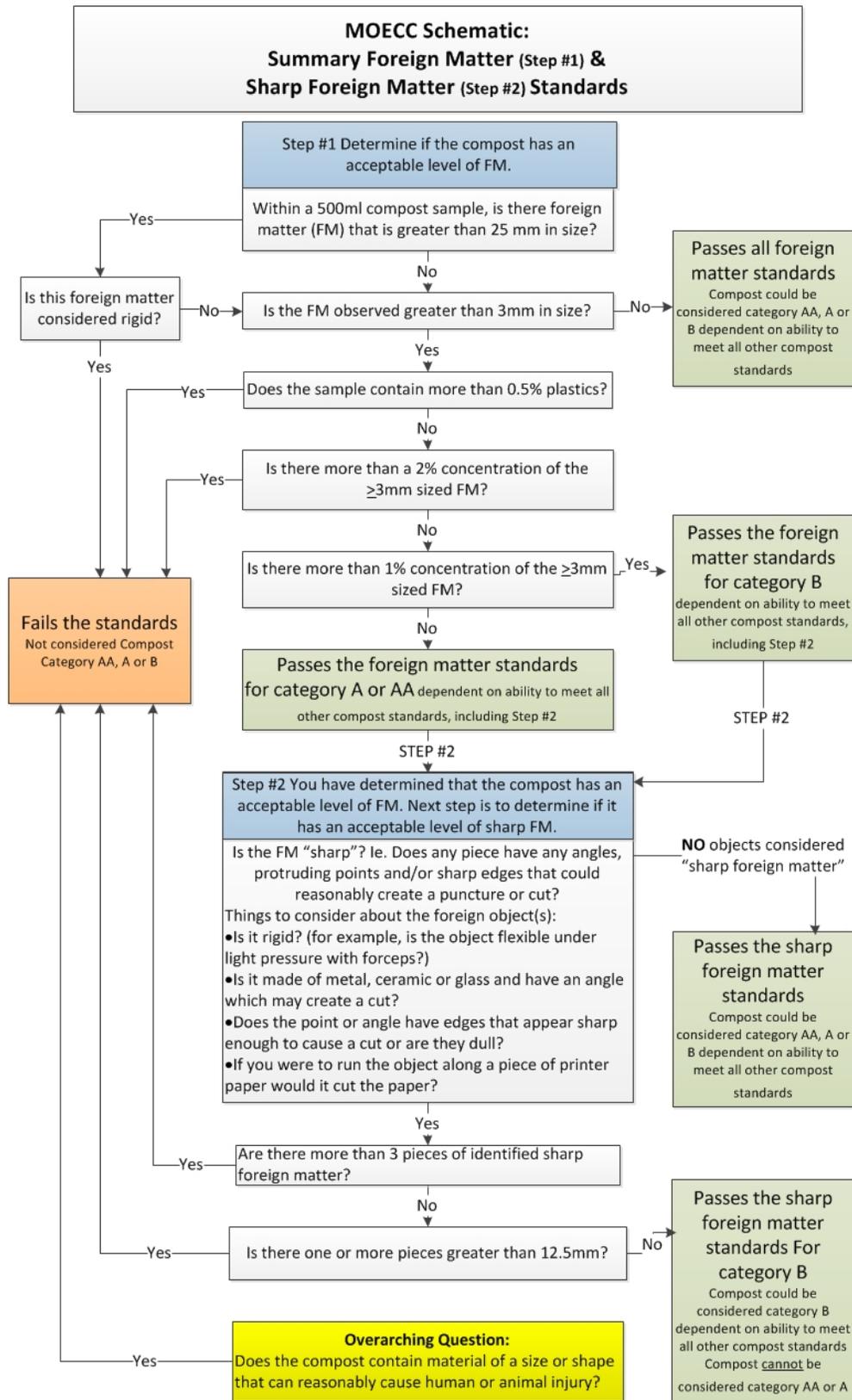
A minimum of 3 of the 4 subsequent samples should pass in order to meet the Category B compost requirement. If these conditions are not met, the batch should fail and should be reprocessed.

### **1.3 Analysis and Reporting Guidance Regarding Sharp Foreign Matter**

For foreign matter and sharp foreign matter, the ministry recommends laboratories and/or producers analysing compost consider performing the following actions:

1. Use the ministry recommended schematic as an aid when analysing for foreign matter and sharp foreign matter.
2. Document and, when practical, retain the sharp foreign matter collected through analysis for future reference.

## 1.4 Foreign Matter and Sharp Foreign Schematic



### Summary

#### Small

Less than or equal to 3mm – Acceptable

#### Medium

| 3mm-----25mm |

- No angles (will not reasonably cause harm) – Acceptable
- Angles, but flexible (will not reasonably cause harm) – Acceptable
- Angles, not flexible (may reasonably cause harm), maximum of 3 pieces of sharp foreign matter per 500ml sample **AND** no sharp foreign matter exceeding 12.5mm – Acceptable for Category B
- Angles, not flexible (may reasonably cause harm), larger than 12.5mm – NOT acceptable

#### Large

| bigger than 25mm-----| - Not Acceptable, however consider if the material is non-rigid and difficult to screen out it may be considered acceptable.

All other compost standards can be found in **Part II in the “Ontario Compost Quality Standards”**

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Figure 1: Foreign Matter and Sharp Foreign Matter Schematic