

## CLARIFICATIONS TO *AMS-III.F AVOIDANCE OF METHANE EMISSIONS THROUGH COMPOSTING*

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This document provides clarifications applicable to *AMS-III.F Avoidance of methane emissions through composting, v12.0*. Such clarifications are effective on their issuance date. Project proponents and validation/verification bodies (VVBs) shall apply and interpret *AMS-III.F v12.0* consistent with the clarifications set out in this document.

| Correction/Clarification | Description   | Document and Section Reference  | Effective Date  |
|--------------------------|---|---|---|
| Clarification 1          | Applicability to insect composting                                      | <i>AMS-III.F v12.0</i> , Section 2, Scope / Applicability, and entry into force | Effective immediately, including all project requests currently in the Verra project review process |
| Clarification 2          | Determination of the methane and nitrous oxide project emission factors | <i>AMS-III.F v12.0</i> refers to <i>CDM TOOL13</i>                              | Effective immediately, including all project requests currently in the Verra project review process |
| Clarification 3          | Procedures for demonstrating additionality                              | <i>AMS-III.F v12.0</i> , Section 3, Normative references                        | Effective immediately, including all project requests currently in the Verra project review process |
| Clarification 4          | Use of the latest version of IPCC documents, except for                 | <i>AMS-III.F v12.0</i>  | Effective immediately, including all project requests currently in the                              |

the GWP values

Verra project review process

## 1 CLARIFICATION 1: Applicability to composting using insects, earthworms, and others

### **Clarification:**

Composting under AMS-III.F v12.0 covers any type of controlled aerobic biological treatment, including microorganisms, insects, earthworms and others. Composting activities involving insects are also included in the methodologies.

The same applies to the Clean Development Mechanism (CDM) *TOOL13 Project and leakage emissions from composting*, referenced by the methodology to determine project emissions from composting.

### **Background:**

Composting using insects is a controlled biological treatment of biomass or other organic matter under aerobic conditions.

## 2 CLARIFICATION 2: Determination of methane and nitrous oxide emission factors

### **Clarification:**

When applying *TOOL13* for composting activities using insects, the following option 3 may be applied to determine methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emission factors (EF<sub>CH<sub>4</sub>,y</sub> and EF<sub>N<sub>2</sub>O,y</sub>),

Emission factors may be sourced from relevant and recent peer-reviewed scientific literature in addition to the options provided in *TOOL13*. However, the values must comply with the most recent version of the *VCS Methodology Requirements*, Section 2.4, Models, Default Factors and Proxies. Project participants must justify that the project composting conditions are comparable to those in the literature source. Further, the value applied must be either (a) confirmed by an independent third-party organization or an external expert, or (b) a conservative factor must be applied based on the uncertainty of the values reported in the literature. A conservative (i.e., higher) value must be selected if literature sources provide a range.

Further, the VVB must assess that the selected emission factors are conservative and representative of on-site conditions, i.e., that the conditions of the literature values are comparable to those of the

project. The VVB must also cross-check the emission factors against values of other relevant sources or similar projects, if available.

This clarification is not applicable to composting projects using microorganisms.

**Background:**

To determine the project emissions from composting, *AMS-III.F v12.0* refers to *TOOL13*. Composting activities using insects, such as black soldier flies (BSF), may have different emission factors compared to those of other composting activities with microorganisms. Given that the default values in *TOOL13* are based on microorganisms, they may not reflect the specific conditions when using insects.

### 3 CLARIFICATION 3: Procedures for demonstrating additionality

**Clarification:**

Projects applying *AMS-III.F* in non-Annex I are deemed automatically additional where they comply with the conditions for automatic additionality provided in *ACM0022*.

**Background:**

All projects are eligible to apply CDM large-scale methodologies, even if they fall within the small-scale threshold. Therefore, if a project activity applies the small-scale methodology *AMS-III.F*, the automatic additionality conditions under the large-scale methodology *ACM0022* are also applicable.

### 4 CLARIFICATION 4: GWP and IPCC guidelines

**Clarification:**

The global warming potential (GWP) must be applied per the most recent version of the *VCS Standard*. For all other parameters referring to the *IPCC Guidelines for National GHG Inventories*, the most recent version must be applied.

**Background:**

*AMS-III.F* refers to the *2006 IPCC Guidelines for National GHG Inventories*. However, as per the *VCS Standard*, Section 1.1, when such documents are updated, the most recent version must be used.