Approved baseline and monitoring methodology/ methodological tool clarification response form (Version 02.0)

INFORMATION TO BE COMPLETED BY THE SECRETARIAT OR PANEL/ WG	
Date and number of Panel/ WG meeting:	27–31 January 2014/MP 62
Title/Subject of the request for clarification:	Clarification for the ex-post determination of $F_{CH4,EL,y}$ by taking into account particular monitoring requirements as defined in item "33 a)" of ACM0001 ver. 15
Reference number of the request for clarification:	AM_CLA_0252
Exact reference (number, title and version) of the methodology or methodological tool to which the request for clarification applies:	ACM0001: Flaring or use of landfill gas – version 15.0.0
Fast track or Regular track:	☐ Fast track ☒ Regular track

Summary of the request for clarification

Dear members of the Meth Panel,

We at Unicarbo Energia e Biogás Ltda. act as a CDM consultancy service company that support different project participants / coordinating/managing entities of registered or proposed CDM Project Activities and Programme of Activities respectively which are hosted in different countries of South America (with special focus in project activities under scope 13).

We envisage this communication a unique opportunity to clarify our very relevant and pertinent doubt and concern (which might also be a doubt/concern for other CDM practitioners worldwide) as presented and argued as follows.

Request for clarification about applicable requirements defined in items 33 a) of the ACM0001 version 15.0

ACM0001 (version 15.0) states the following:

"32. $F_{CH4,EL,y}$, $F_{CH4,HG,y}$ and $F_{CH4,NG,y}$ are determined using the "Tool to determine the mass flow of a greenhouse gas in a gaseous stream" and monitoring the working hours of the power plant(s), boiler(s), air heater(s), glass melting furnace(s) and kiln(s), so that no emission reduction are claimed for methane destruction during non-working hours. This is taken into account by monitoring the hours that the equipment utilizing the LFG is operating in year y ($Op_{j,h,y}$).

33.The following requirements apply:

(a) The gaseous stream the tool shall be applied to the LFG delivery pipeline to each item of electricity generation or heat generation equipment j, or the natural gas distribution system ,or the trucks. $F_{CH4,EL,y}$ and $F_{CH4,HG,y}$ are then calculated as the sum of mass flows to each item of electricity generation or heat generation equipment j;"

We are seeking for clarification about the following issue:

Item 33. a) states "*(…)The gaseous stream the tool shall be applied to the LFG delivery pipeline to each item of electricity generation*", referring to the Tool to determine the mass flow of a greenhouse gas in a gaseous stream for the determination of $F_{CH4,EL,y}$, $F_{CH4,HG,y}$ and $F_{CH4,NG,y}$.

In our view, the term "*each item*" is not clearly or sufficiently defined/explained.

Initially, we would like to highlight that in the particular case of initiatives promoting the utilization of landfill gas (LFG) as gaseous fuel for electricity generation, the normally applied technology in such electricity generation facilities is the use of a set internal combustion engines coupled to electricity generators (engine-generator sets) with nameplate installed capacity in the ranging from 500 kW to 2.0 MW. Use larger

equipment (e.g. using turbines) has not been so common. In the particular case of LFG utilization initiatives using engine generator sets for electricity generation, it is often applied modular solutions using engine-generator sets + ancillary equipment (fuel supply system, cooling system, power transformers, etc).

Our doubt/concern is related to how the flow of collected LFG in the "*LFG delivery pipeline to each item of electricity generation"* shall be monitored*:*

- Shall the monitoring plan of a project activity applying ACM00001 version 15.0 be designed by considering the installation and operation of an individual mass flow meter for each engine generator set?

- As an alternative, shall the monitoring plan of a project activity applying ACM00001 version 15.0 be designed by considering the installation and operation of an individual mass flow meter for all the electricity generation facility as commonly seen? In this context, it is important to note that we support a registered CDM project activity promoting utilization of LFG of which the project design includes 28 individual engine-generator sets. In this context, if the use of a unique flow meter for the whole electricity generation facility is not acceptable, 28 individual flow meters would need to be installed and regularly maintained (incl. meeting of calibration requirements)

As experts in the area of use of LFG for electricity generation, we highlight that we perceive the costs for installation and operation and maintenance of a large number of flow meters as a burden/challenge for some specific cases. Moreover, the technical requirements for the installation of flow meters in pipelines might also represent a challenge in the particular case of electricity generation facilities using modular engine-generator set solutions (lack of space to install the flow meters of which appropriate operation normally requires a straight pipeline with a minimum length). Finally, we also highlight that in the particular case of previously implemented CDM project activities applying CDM methodologies issued/published prior to versions 12, 13, 14 and 15 of ACM0001 (e.g.: AM0011, AM0003, AM0002, ACM0001 up to version 11, AMS III.G), the use of a unique flow meter for the whole electricity generation facility has been a practice (regardless of the total nameplate capacity of the electricity generation facility or number of installed engine-generator sets). In this context, a requirement for using individual flow meter for each engine generator set would also represent a challenge/burden for previously implemented project activities when the crediting period is to be renewed (and monitoring requirements as per the latest version of ACM0001 are to be applied).

We thus seek clarification on this issue and hope that the potential burden/challenges highlighted in this communication are somehow considered by the panel.

Further input from PP regarding the specific issue perceived:

Does the methodology refers to each item of the power generation as each item of power generation, in the sense that each power generation unit that composes the power plant, implying thus that each generator set must have an independent flow meter, or if the mentioned methodology allows that the flow used by one power plant, regardless of the number of generator sets that comprises such power plant, in measured by one flow meter.

Clarification by the secretariat or Panel/ WG

The Methodologies Panel (Meth Panel) of the Executive Board of the clean development mechanism (CDM) agreed to clarify that the monitoring plan of a project activity applying ACM0001 version 15.0 shall be designed in such a way that landfill gas flow to each engine generator is monitored by installation and operation of an individual mass flow meter for each engine generator set.

The Meth Panel also noted that that under some circumstances the requirement to meter landfill gas supply to each electrical or thermal equipment may impose significant cost and/or technical challenges. The Meth Panel agreed to indicate that, upon receipt of a revision request, it will consider recommending further guidance in the methodology to simplify the metering requirement to reduce transaction costs related to monitoring.

The author of the submission may, in submitting a revision request, consider for example, proposing a single transducer for all flow elements or flow detectors (e.g. a valve positioning detector) for the individual equipment instead of flow meters if a meter for total flow is in place.

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Document information

Version	*Date*	*Description*
02.0	18 July 2013	Revised to remove the row "Date and signature of the chair and vice chair of Panel/WG (in case of clarification by Panel/WG)"
01.0	4 July 2013	Initial publication. This document supersedes and replaces the following documents: • Recommendation Form for Small Scale Methodologies (F-CDM-SSCwg) (Version 01.1) • Recommendation Form for Small Scale A/R Methodologies and Procedures (F-CDM-SSC-AR) (Version 01.1)

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