



To: **ALL PROJECT DEVELOPERS AND VERIFICATION BODIES**
Date: **DECEMBER 12, 2013**
Re: **MANUFACTURER RECOMMENDATIONS FOR METER MAINTENANCE**

Scope

This memo pertains to all protocols with Quality Assurance and Quality Control (QA/QC) requirements that contain reference to manufacturer guidance¹ related to the maintenance of biogas metering and analysis equipment, but where such manufacturer guidance is not contained within the text of protocol.

Background

The QA/QC requirements for certain project protocols include maintenance requirements that refer to manufacturer guidance related to monitoring equipment. For example, the Landfill Project Protocol V4.0 states:

All gas flow meters and continuous methane analyzers must be:

- *Cleaned and inspected on a regular basis, as specified in the project's Monitoring Plan, with activities and results documented by site personnel. Cleaning and inspection frequency must, at a minimum, **follow the manufacturer's recommendations.***
- *Field checked for calibration accuracy by a third-party technician with the percent drift documented, using either a portable instrument (such as a pitot tube) **or manufacturer specified guidance**, at the end of – but no more than two months prior to or after – the end date of the reporting period*
- *Calibrated by the manufacturer or a certified third-party calibration service **per manufacturer's guidance** or every 5 years, whichever is more frequent*

(Emphasis added)

In order to satisfy the QA/QC requirements of protocol versions which include this, or similar, language, project developers must have some knowledge of the manufacturer's guidance. For some project developers and verification bodies, it has been unclear what steps project developers are expected to take to ascertain the manufacturer's guidance on equipment maintenance beyond relying on the equipment documentation, and how verification bodies should verify these efforts.

Availability of Manufacturer Guidance

Manufacturer guidance on maintenance and calibration frequency may be found in the OEM (original equipment manufacturer) documentation that is provided with the metering equipment. However in some cases the original documentation does not provide guidance for the QA/QC items referenced in the protocol. The manufacturer might not include this guidance in the documentation for many reasons, most notably if the guidance is application specific, i.e., dependent on the quality or consistency of the gas being measured. There are also rare instances where the manufacturer does not provide some or all of this guidance at all.²

¹ For the purposes of this memo, the term "guidance" is used in place of the terms "manufacturer recommendations," "manufacturer specified guidance," and "manufacturer's guidance" as used in protocol QA/QC requirements.

² This policy memo does not relax the maintenance requirements of any protocol, even in the absence of manufacturer guidance: the project must always at least meet the specified or minimum schedule set by the respective protocol for cleanings and inspections, field checks, and calibration events.

Expectations for Project Developers

For all QA/QC procedures a project followed during a reporting period, the project developer should be prepared to provide evidence to support the assertion that these were the correct procedures according to the protocol requirements.

If a project developer is planning to report emission reductions using a protocol which refers to manufacturer guidance, the project developer must document that an effort was made to ascertain the manufacturer guidance for each device that is subject to meter-specific QA/QC requirements. Project developers should assume that meter manufacturers will have guidance regarding equipment maintenance and calibration procedures. While the expectation is that equipment manufacturers will take steps to communicate any guidance to their customers, the project developer should not adopt an entirely passive role. If no guidance is included in the original documentation, reasonable steps to seek out relevant guidance include, but are not limited to, checking the manufacturer's website, including FAQs, and contacting the manufacturer directly to confirm whether official guidance exists for each of the QA/QC requirements specified in the protocol. Examples of documentation for the purpose of verification could include a time-stamped screenshot of the website and copies or other records of correspondence with the manufacturer.

A project developer will not be penalized if a manufacturer only first provides guidance after the project developer inquires about it or if the manufacturer subsequently changes this guidance but does not communicate this to the project developer. However, best practice would be to include an ongoing procedure for reconfirmation of this guidance in the monitoring plan. If the project developer discovers new guidance at any point during the project's crediting period, or the verification body discovers new guidance during the process of verification, the project developer must comply with the new guidance from the date of discovery.

Expectations for Verification Bodies

The verification body should be able to confirm the claims of the project developer regarding the appropriate QA/QC standard for the specific project, regardless of whether the project developer is following manufacturer guidance or asserting that none exists.

If the project developer claims that the manufacturer does not provide guidance, the project developer must be able to demonstrate reasonable efforts were made to confirm this, including searching for guidance on the manufacturer's website and directly requesting guidance on proper maintenance from the manufacturer. The verification body should conduct at least a cursory review of available information and/or personnel to confirm the absence of guidance. If the project developer did not meet a protocol requirement because of a missed calibration or other recommended maintenance event, the verification body should determine whether the project developer met the expectations outlined above. It is possible that the verification body, through previous experience with the equipment in use by the project, has more current or detailed knowledge of manufacturer guidance than the project developer, despite efforts made by the project developer to acquire this knowledge; in this case, the verification body may use professional judgment in determining whether the project developer has met the expectations outlined above.

If the project developer met the expectations outlined above, the project developer shall be deemed to be in conformance with the protocol. If the verification body determines that the project developer did not meet the expectations outlined above, the project developer shall be deemed to be out of conformance with the protocol.