United Nations Framework Convention on Climate Change

Ninth CDM Roundtable

Session III
Monitoring guidance for measurement issues in methodologies

Bonn, Germany, 23 August 2013

UNFCCC Secretariat
SDM programme

Background

Mandate

Project 195 “Monitoring Guidance” which was included in the Secretariat's management plan (MAP) for year 2013–2014 that was approved by the CDM–EB at its 71st meeting.

Inputs from Meth panel and SSC-WG is considered while preparing the draft document.

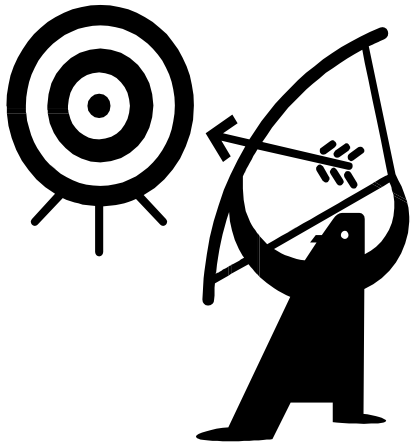
Objective of the guidelines

Objective

Produce a guidelines which will comprises

a) general guidance for setting the monitoring plan for a project activity or PoA and;

b) the best practices for dealing with situation that may result into a temporary deviation, when the requirements under applied methodology are not followed during a monitoring period.



Scope of the guidelines

Scope

- Analysis of existing requests for deviation submitted to the board during December 2010 to February 2013.
- Cover issues that could be mainly related to the energy and waste management sector methodologies.

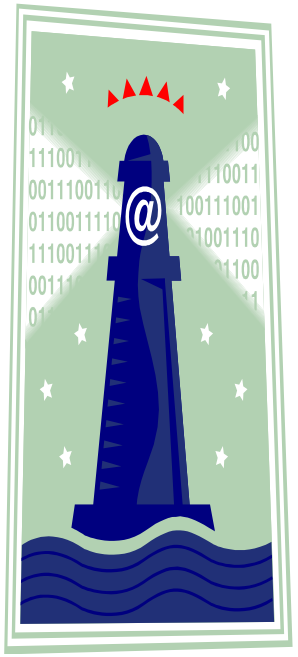
Overview

- General guidance for setting the monitoring plan
- Best practice examples

Setting monitoring plan - Principles for monitoring of GHG emissions

- **Relevance**
- **Completeness**
- **Consistency**
- **Accuracy and conservativeness**
- **Transparency**

The aim of these principles is to ensure reliability and prevent any possible simplification that could lead to an overestimation of emission reductions.



Preparing the Monitoring plan

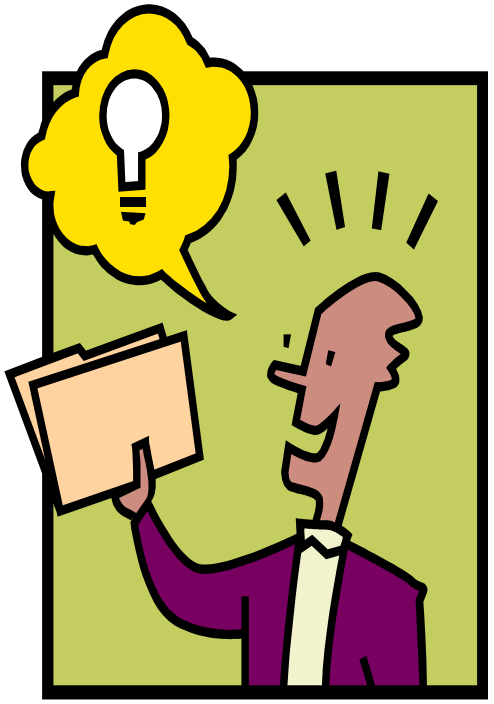
- **Issue:** PPs need to develop a detailed monitoring plan while preparing the PDDs (before implementing the project activity) and then if there are any changes to the same a lot of time is consumed in seeking the approval to changes.

- **Proposal:**
  a) Allow PPs to prepare a generic monitoring plan at validation stage and
  b) Move most of the specific requirements for the verification stage

- PPs should ensure that the monitoring of the project activity is carried out as recommended by the applicable methodology.

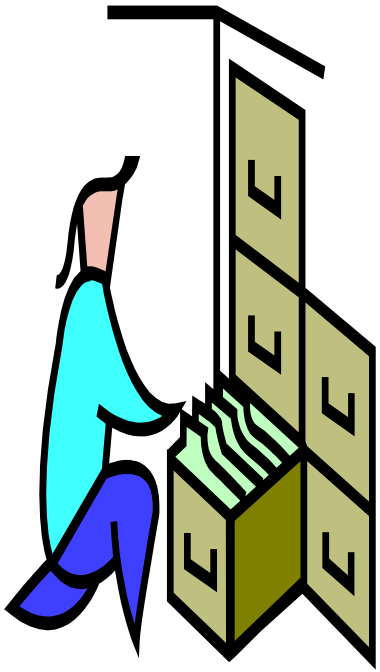
Best practice examples

Practical guidance on how to address different issues faced during the implementation of the CDM projects/PoAs, which may lead to a temporary deviation.



General issues

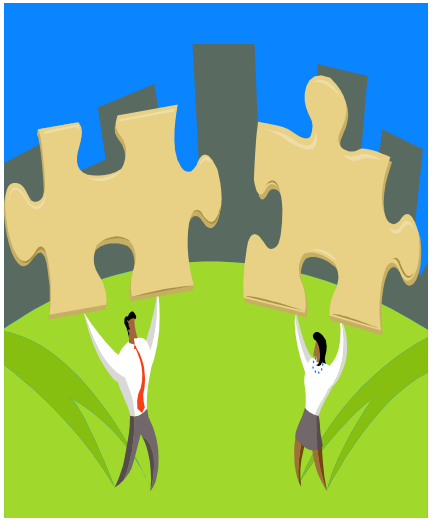
Issue 1: A parameter is not archived electronically but it is recorded in a physical media like paper files for the monitoring period.



Proposal: No deviation request is required if project participants demonstrated that the parameter was recorded manually and it has minimum impact on the calculation of emission reductions. DOE shall accept this deviation; however raise a FAR (Forward Action Request) for project participant to archive the data electronically during the next monitoring period.

Particular issues for consideration and discussion

Issue 2: A main parameter needed to determine the emissions of the project activity (e.g. methane concentration or flow) is not monitored.



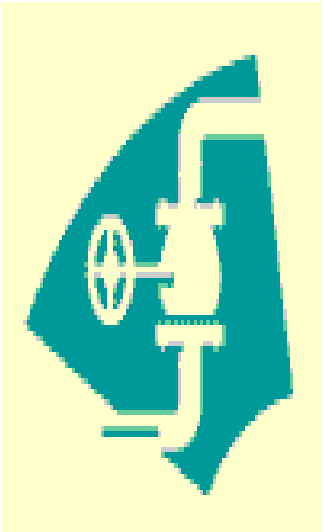
Proposal: ERs can not be claimed - If PPs does not have any measurement records of supplementary parameters based on which missing parameter can be calculated.

ERs can be claimed - If measurement records of supplementary parameters are available based on which the missing parameter could be calculated in a conservative way and the result could be compared with the last one year measurement records to demonstrate that there is no substantial difference between the measured and calculated value.

The QA/QC procedures followed for measurement of supplementary parameters should be in accordance with the applied methodology.

Particular issues for consideration and discussion

Issue 3: A parameter (e.g. volume of wastewater in the bio-digester, amount of organic waste in the landfill, amount of biomass and fossil fuel used in the project activity, average calorific value of biomass, etc.) which does not have any impact on emission reduction calculation, is not monitored.



Proposal: PPs should demonstrate that the parameter is used for cross checking purpose and demonstrate (where applicable) the mass and energy balance satisfactorily.

Particular issues for consideration and discussion

Issue 4: The calorific value of the fossil fuel is not monitored due to failure of the equipment.

Proposal: PPs could select one of the following options:

a) Calorific value reported in test report by supplier; or
b) A conservative default value for calorific value is selected from recent version of IPCC database.

Particular issues for consideration and discussion

Issue 5: Use of a declaration of conformity from the monitoring instruments manufacturer instead of the calibration certificate is provided during the verification of the project activity.

Proposal: The declaration of conformity from the manufacturer or a document stating that instrument was calibrated at factory is justified for assessing validity of calibration.

The validity of the calibration starts from date of calibration at the factory, and not from the date of installation of the instruments.

Particular issues for consideration and discussion

Issue 6: The measurement equipment is shared with other projects (e.g. net electricity delivered to the grid by the project).

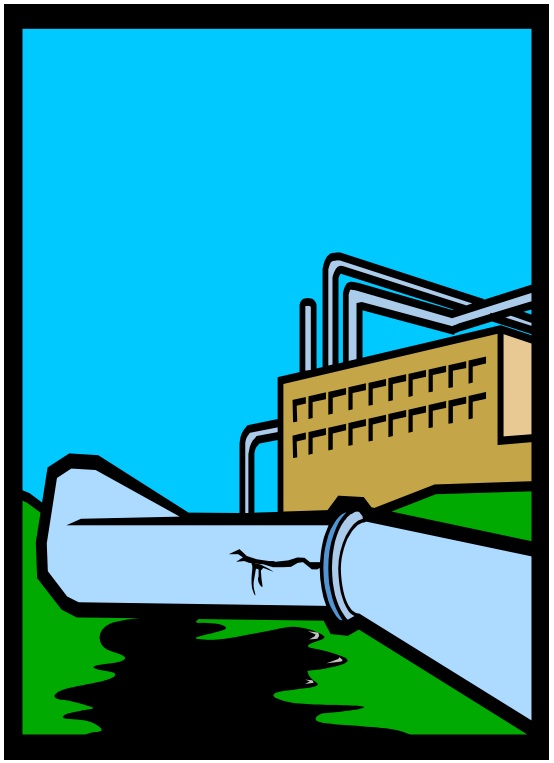
Proposal: The parameter can be calculated based on supplementary parameters that are monitored with dedicated measurement equipment.

The QA/QC procedures followed for measurement of these parameters should be in accordance with the applied methodology.

Particular issues for consideration and discussion

Issue 7: Method for measurement of loss of biogas from pipeline is not as per monitoring plan.

Proposal: PPs should demonstrate by conducting leakage test at the welded joints of pipeline (welded joints are identified as potential source of leakage) that there was no leakage of biogas observed during the test and thus no project emissions were considered for the monitoring period.



Specific issues

Issue 1: In case of application of AM0022 monitoring of parameter 'Amount of chemical oxidizing agents entering the system boundary' is monitored once in a month during the monitoring period.

Proposal: PPs should demonstrate that the there is no fluctuation in the monitored value of the parameter during the period where monitoring and analysis is carried in-line with the monitoring plan (after or before monitoring period), along with monitoring of the sulphate content using the nationally accepted method and the results showed no or limited fluctuation.

Particular issues for consideration and discussion

Issue 2: In case of application AM0013 the parameter ‘Stack gas flow rate’ is not on monitored as per the requirement in the monitoring plan.

Proposal: PPs should follow an alternative method e.g. monitoring the velocity of stack gas using Pitot tube and multiply the same with stack flow area to arrive the daily stack gas flow value, to monitor the stake gas flow rate during the period when it is not monitored as per the requirement in the monitoring plan.

Next steps

- The secretariat will prepare a concept note for consideration by the Board at EB 75 (30 September - 4 October 2013) and call for public input will be launched.
- The secretariat will prepare draft guidelines for consideration by the Board at EB 76.
- Further consultation with stakeholders and the transitional measure are to be decided later.

Future scope of work

- **Explore categorization for emission sources –** Different monitoring requirements depending on GHG emission per sources (e.g. more than X tCO_2/year stricter monitoring and calibration requirements)

- **Control system –** PPs to make a risk assessment of possible mistakes, errors, incidents that could happen during the monitoring of the project activity and document in the PDD the course of action taken; this could help to select the most appropriate measurement instruments and also avoid deviation requests.

- **Simplify the approval process –** Prior approval from the Board is not required in case of **improvement in monitoring plan** i.e. to monitor a parameter with more accurate method;
  a) instead of 0.5S meter using 0.2S meter; or
  b) changes lead to a more accurate and conservative estimation of ER.