CDM: Recommendation Form for Small Scale Methodologies (version 01)

(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)

Date of SSC WG meeting:	As per procedures for fast track clarifications
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Applicability of AMS III.B. and AMS III.Q. to a project involving installation of a new 8 TPH Steam Boiler based on hydrogen and FO for generation of process steam
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS III.B. and AMS III.Q.
Name of the authors of the query:	SGS UK Ltd. Siddharth.Yadav@sgs.com Pankaj.Mohan@sgs.com

Summary of the query:

Please use the space below to summarize the query related to SSC methodologies/categories SSC Modalities and Procedures provide recommendation/analysis of the SSC WG.

A clarification as to whether AMS III.B. and/or AMS III.Q. is applicable to a project activity is required that involves:

- The installation of a new 8 TPH Steam Boiler based on Hydrogen gas and FO for generation of process steam to replace coal fired steam generation;
- In the absence of the project activity, the hydrogen fired at the boiler would have been vented off to the atmosphere;
- The source of the hydrogen gas is the chemical reaction (electrolysis of NaCl brine solution) of the caustic soda manufacturing process through membrane cell technology, the overall reaction is as follows: $2NaCl + 2\ H2O \rightarrow 2NaOH + Cl2 + H2 \uparrow$;
- The energy (steam) produced with the recovered hydrogen gas 'should be' (sec: understood as 'is') measurable;
- The steam produced due to the project activity would be utilised for process steam requirement within the facility; and
- The flow rate, temperature and pressure of the steam produced from the boiler will be measured directly.

Recommendation by the SSC WG :

Please use the space below to provide amendments/change (in your expert view, if necessary).

This recommendation is as per the procedures for fast track clarifications as specified in paragraph 8 of the 'procedures for the submission and consideration of request for clarification of approved small scale methodologies' found at <http://cdm.unfccc.int/Reference/Procedures/MethSSC_proc01_EB34a06.pdf>.

Answer to authors of query by the SSC WG :

Please use the space below to provide answer to the authors of the above query

The small scale-working group of the CDM Executive Board would like to thank the author for the submission.

The SSC WG agreed to clarify that AMS III.B. is not applicable to the proposed project activity as the approved methodology is only applicable to project activities that switch from a higher GHG intensive fossil fuel to lower GHG intensive fossil fuel. Hydrogen is not considered a fossil fuel but simply represents an energy carrier.

In this context, it is to be noted that a similar project activity was rejected by the Board, see project ref. no: 0951 'Energy efficiency and fuel switching measures in the caustic soda and sodium cyanide plant at Vadodara complex of GACL' (http://cdm.unfccc.int/Projects/rejected.html). It is important to note that the PDD of 0951 indicated a market value of Rs. 6.25 to Rs.19/NM^3 for Hydrogen in addition to the following remarks: "In switching from NG to hydrogen GACL faces loss due to loss of market price attached to hydrogen and it amounts to approximately INR 100 million…. Hydrogen gas, a co-product of the caustic soda process, has demand by other industries in the region for hydrogenation purpose…. Thus, for any industry with an infrastructure and buyer for hydrogen it would not be a common practice to use it for internal firing purpose".

It shall be noted that AMS III.Q. defines waste gas/heat/pressure as: 'by-product gas/heat or pressure of machines and technical processes for which no useful application is found in the absence of the project activity and for which it can be demonstrated that it has not been used prior to, and would not be used in absence of the CDM project activity (e.g. because of low pressure, heating value or quantity available). In the project scenario, this waste gas/heat/pressure is recovered and conditioned for use'.

The SSC WG is of the view, given the above, substantiating of the remark in the submission 'In the absence of the project activity, the hydrogen fired at the boiler would have been vented off to the atmosphere' is critical to determine if AMS III.Q. would be applicable to the proposed project activity.

Signature of SSC WG Chair ……..

(Ulrika Raab)

Date: 28/11/2007

Signature of SSC WG Vice-Chair ……..

(Richard Muyungi)

Date: 28/11/2007

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