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Att: CDM Executive Board

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Your ref.:	Our ref.:	Date:
CDM Ref 1516	ASEK/PETMO	14 November 2008

Response to request for review

"The model project for renovation to increase the efficient use of energy in brewery in Viet Nam" (UNFCCC Ref. No. 1516)

Dear Members of the CDM Executive Board,

We refer to the requests for review raised by three Board members concerning DNV's request for registration of the "The model project for renovation to increase the efficient use of energy in brewery in Viet Nam" (UNFCCC Ref. No. 1516), and we would like to provide the following initial response to the issues raised by the requests for review.

Request 1:

The DOE is requested to clarify how it has validated that the project start date complies with the definition in the CDM Glossary of terms.

DNV Response:

DNV would like to refer to the relevant part of the CDM Glossary of terms, "*the start date shall be considered to be the date on which the project participant has committed to expenditures related to the implementation or related to the construction of the project activity. This, for example, can be the date on which contracts have been signed for equipment or construction/operation services required for the project activity*."

The starting date of the project activity was defined as 25 May 2004, the date of the comprehensive contract between Hanoi Beer Alcohol Beverages Corporation, BIA THANH HOA CO., LTD and Mayekawa Mfg. Co., Ltd. The contract covers the following items;

- Design of the system
- Equipment
- Piping
- Electrical and measuring equipment
- Integrated monitoring and controlling unit
- Transportation, delivery and storage
- Civil work and construction
- Installation and removal
- Inspection
- Spare pats, etc.

The contract was provided to DNV by the PP and DNV was able to verify it to appropriately represent the date of the order for equipment or construction/operation services required for the project activity. No earlier financial commitment has been found for the project. The contract has been attached to this response.

Request 2:
The DOE is requested to provide further clarification on how the validated baseline complies with requirements of paragraph 6 of AMS-II.D v8. Also, in accordance with the "Modalities and procedures for a clean development mechanism", paragraph 6, the PP/DOE are requested to provide the data utilized to calculate the baseline.

DNV Response:
Paragraph 6 of AMS-II.D v8 requires as follows;
"In the case of replacement, modification and retrofit measures the monitoring shall consist of:
(a) Documenting the specifications of the equipment replaced;
(b) Metering the energy use of the industrial facility, processes or the equipment affected by the project activity;
(c) Calculating the energy savings using the metered energy obtained from subparagraph (b)"

The project activity is aiming for the total energy efficiency improvement of the beer manufacturing process and it consists of a number of equipment affected by the project. The project participants consider the whole beer manufacturing system as a single equipment and had monitored the energy consumption per unit of beer manufactured, i.e. kg_{coal}/litre beer and kWh_{elec}/litre beer. DNV concluded this view as appropriate.
The beer manufacturing capacity of the respective year during the crediting period is described in Table 1, Section B.2 of the PDD. And the fuel monthly average coal and power consumption rates are described in Table 1, Annex 4 of the PDD[1]. Given that the whole manufacturing plant is considered as a whole, this table satisfies requirement (a) above. For transparency, a list of all major energy consuming equipment in the manufacturing plant, including specification of the units modified/replaced for this project and their corresponding emission reductions, is attached to this response.

As described in the PDD, Section B.7.1, the project participants will during the crediting period monitor the consumption of coal, electricity and diesel oil. This fulfils requirement (b) above.

Requirement (c) is fulfilled by the *ex-post* calculation of the energy saving as per the table provided in Section B.6.4 of the PDD.

The monitoring plan applied by the PP to monitor the baseline data is provided in attachment 2, whereas the sample calculation based on the raw data is provided in attachment 3.

[1] The manual data transfer was assessed again and a minor error from the spreadsheet to the PDD, Annex 4, Table 1 was revealed. The beer production of January 2004 was not 2521 kl but 2716 kl. Thus the most conservative coal and power consumption rate during consecutive twelve months should be 59.6 kg_{coal}/kilolitre beer and 91.3 kWh_{elec}/kilolitre beer instead of 59.9 kg_{coal}/kilolitre beer and 91.7 kWh_{elec}/kilolitre beer described in the PDD respectively. The PDD and corresponding validation report were corrected accordingly, and attached to this response.

Request 3:

The DOE is requested to further clarify how the monitoring plan complies with the monitoring requirements of AMS-I.D v10 and AMS-II.D v8, including: a) monitoring of the grid emission factor ex-post; and b) documenting the specifications of the equipments replaced or retrofitted.

DNV Response:

a) The grid emission factor to be used to determine the baseline and project emission was determined *ex-ante* based on the data provided from the Institute of Energy, Electricity of Vietnam (EVN). It was clearly described in the PDD, B.6.2, and the grid emission factor obtained, 0.599 tCO_2/MWh was verified to be correct.

Attachment 4 is the spreadsheet for calculating the grid emission factor.

b) As explained in the response to *Request 2* above the project activity is aiming for the total energy efficiency improvement of the beer manufacturing process as a whole, even though it consists of a number of equipment affected by the project. The energy consumption data for the manufacturing plant is provided in Table 1, Annex 4 in the PDD, as explained above. For transparency, a list of the major energy consuming equipment in the manufacturing plant, including specification of the units modified/replaced for this project and their corresponding emission reductions, is attached to this response.

We sincerely hope that the Board accepts our above explanations.

Yours faithfully
for DET NORSKE VERITAS CERTIFICATION AS

H.W. Brinks

Hendrik W. Brinks
Technical Director for CDM
International Climate Change Service

Akira Sekine
Project Manager

Attachments:

1. Implementation document
2. Baseline monitoring plan
3. Grid electricity emission factor (spreadsheet)
4. Revised PDD
5. Revised Validation report
6. List of equipment in manufacturing plant