RESPONSE TO REQUEST FOR REVIEW

From: Bureau Veritas Holding SAS

To: UNFCCC (Project assessment team) and CDM Executive Board

Reference: Request for Registration "Use of charcoal from renewable biomass originated from forest plantations for the production of primary iron in Vallourec & Mannesmann do Brasil" (#9131)

Dear CDM Team,

Regarding the above mentioned reference, Bureau Veritas Certification Holding SAS (BVCH), had performed the validation of the proposed project activity. Upon the request for registration, on 27th May 2013 the PP/DOE were informed of a request for review raised by either three members of the CDM EB or one Party involved in the project activity.

The issues raised in the request for review and the DOE's comments and consideration are presented below.

1) *The DOE is requested to further substantiate on how the CDM alleviates the identified barriers to a level that the project is not prevented any more from occurring by the barriers and the financing of the project was assured only due to the benefit of the CDM. The DOE should note that barriers that can be mitigated by additional financial means can be quantified and represented as costs and should not be identified as a barrier for implementation of project while conducting the barrier analysis, but rather should be considered in the framework of investment analysis. Please refer to VVM v.01.2 paragraph 115(a); Combined tool to identify the baseline scenario and demonstrate additonality ver 04.0.0, paragraph 21-24 ; EB 50, Annex 13, para 5, 7 and 9.*

According to PDD (version 3), Section B.4 (step 2b.2) and Validation Report (version 03.1), Section 3.6.3, the identified barriers to the implementation of the project activity in comparison to the baseline scenario were validated as follows:

Identified Barriers that would prevent the implementation of remaining alternative scenarios (Step 2; "Combined Tool to Identify the Baseline Scenario and Demonstrate Additionality", version 04.0.0)	***Renewable charcoal iron ore reduction system based on new plantations (project scenario)***	***Coal coke iron ore reduction system (baseline scenario)***
a) Barriers to investment and financing	Yes. Raw material that needs to be planted, harvested and produced, i.e. establishment of new dedicated forest plantations.	No. Readily available raw material i.e. coal coke

a) Barriers to investment and financing	Yes. Disbursement of large amounts to establish the new dedicated forest plantations with long pay back periods.	No. Purchase in spot market, immediate production and sales.
a) Barriers to investment and financing	Yes. Lack of appropriate financial structure for loans and funding.	No. No external financial support is needed.
a) Barriers to investment and financing	Yes. Investments must be made using own capital.	No. Investment is not needed (i.e purchase/selling in the market, no infrastructure needed, etc).
b) Sectoral and Policy barriers	Yes. Historically recognized decline in plantations for fuel purposes affecting national forestry stocks.	No. Coal reserves are available with an estimated duration of more than 100 years.
c) Regulatory barriers	Yes. Land acquisition; investment in lands to establish the new dedicated forest plantations	Not applicable. Coal is an imported good.
c) Regulatory barriers	Yes. Establishment of legal reserves and permanent preservation areas in dedicated forest plantation areas.	Not applicable. Coal is an imported good.
c) Regulatory barriers	Yes. Environmental licensing to establish the new dedicated forest plantations that can take at least 6 to 12 months.	Not applicable. Coal is an imported good.

The DOE would like to confirm that the identification of the barriers presented above and the discussion and means of validation applied to confirm each one of them (including the sources of evidences used) are presented in the Validation Report Section 3.6.3, under Step 2, following the requirement contained in the methodology AM0082 v1 that the "Combined Tool to Identify the Baseline Scenario and Demonstrate Additionality" must be applied (latest at the time of submission was version 04.0). The validation follows the requirement contained in VVM (version 1.2) paragraph 115 (a).

In order to further substantiate on how the CDM alleviated the identified barriers of the proposed project activity, the PP presented to the DOE the document “Contract of Caution” (Ref/9.1/), signed between V&M and a Party (undisclosed for confidentiality purposes) in 18/04/2003 and the document “Certified Emission Reduction Sale Agreement” (Ref/9.2/) signed between V&M and the same Party (undisclosed for confidentiality purposes) in 06/02/2003. The DOE has had access to the referred documents.

These were signed as an intention to buy the CERs generated by the proposed project activity presented to UNFCCC in 2003, together with the new methodology that V&M was elaborating then. These documents emphasize the relevance of the CDM for the PP and its deep interest in approving a methodology and implement the project activity. Also, these contracts could be considered relevant evidences in order to confirm that the financing was assured due to the consideration and selling of potential CDM revenues. This further demonstrates how the CDM alleviates the identified barriers, in line with EB 50, Annex 13, paragraph 5 (example 1).

Furthermore, to demonstrate that the CDM significantly contributes to alleviate the barriers which prevent the implementation of the proposed project activity, it is presented below the relation

between the potential revenues generated by the carbon credits sales and the investments necessary to implement and maintain the renewable dedicated forest plantations:

Costs to implement the forest plantations – R$ (Brazilian Reais)/ hectare (ha)
(Source: EMBRAPA, 2005 – based on GRAÇA et al, 2000) (Ref/63/)

Year 1	R$ 1,034.80
Year 2	R$ 380.00
Year 3	R$ 360.00
Years 4 to 7 (R$320.00 x 4)	R$ 1,280.00
Total	R$ 3,054.80

Project area: approximately 60,000 ha *(Source: spreadsheet "ERs Calculation Tool VMB")*

Total investment: 60,000 ha x R$ 3,054.80 = R$ 183,288,000

Amount of CO_2 for the first crediting period *(Section A.4.4 of the PDD version 3)***:** 5,534,259 tCO_2e

Price of CO_2 (US$/ Ton)	**R$/ US$ (average Year 2000)**	**CO_2 Revenues (in R$)**	**Relation CO_2 revenues/ Total investments**
3.00	1.85	30,715,137	17%
5.00	1.85	51,191,896	28%
10.00	1.85	102,383,792	56%
15.00	1.85	153,575,688	84%

According to the table above the carbon credits revenues could represent 17% to 84% of the investments made in the forest plantations, and were an utterly important incentive to the project activity's implementation. At the time the project was being considered and implemented, an expectation of price up to 20 US$ per tCO2e was reasonable. It was only in the last couple of years or three that the price of the tCO2e declined considerably and such low expectations were impossible to foresee when the project was being considered. The investment is roughly R$ 183 millions (approximately USD 100 million) and only after the seventh year, is the PP able to start the first harvesting. The baseline scenario, on the other hand, does not present to the PP any major investment or long term commitments, as the coal can be readily purchased in the market.

Moreover, according to the "Combined tool to identify the baseline scenario and demonstrate additionality" version 05.0.0, Outcome of Step 2 item 1(b) (ii): "*explain – using qualitative or quantitative arguments – how the registration of the CDM project activity will alleviate the barriers that prevent the proposed project activity from occurring in the absence of the CDM. If the CDM alleviates the identified barriers that prevent the proposed project activity from occurring, proceed to Step 4, otherwise the project activity is not additional*." The PDD, therefore, correctly follows the requirement that if the barriers that prevent the proposed project activity are alleviated by the CDM (as further substantiated above), then it is not necessary to apply Step 3 (Investment Analysis). The

Although the investment analysis (Step 3 in the Combined Tool) is not required (i.e. there is only one baseline alternative which is not prevented by the identified barriers), the PP has now presented the spreadsheets which are part of the study prepared at the decision making moment to implement the project activity (cited in the PP's minutes of the board meeting, listed in Section B.5 of the PDD version 3), which demonstrate that the cost to produce pig iron using renewable

charcoal as a reducing agent equals the cost of producing pig iron using coal coke when the cubic meter of charcoal reaches a maximum of R$43.94 and the real cost for the cubic meter of charcoal was around R$63.00 prior to project implementation. The source and information presented in the spreadsheets (Ref/9.3/) - which is confidential but also enclosed in response to the review - was verified by the DOE and shows that producing pig iron using coal coke is far more competitive (i.e. cheaper and not affected by barriers) than using renewable charcoal.

In summary, it is the DOE opinion that the validation and explanation provided above are in line with the requirements contained in the: VVM v.01.2 paragraph 115(a); Combined tool to identify the baseline scenario and demonstrate additonality ver 04.0.0 (and 5.0); and EB 50, Annex 13, paragraphs 5, 7 and 9.

2) *The DOE shall further substantiate on how continuing and real actions were taken to secure CDM status for the project in parallel with its implementation during the period 20/01/2005 - 04/03/2011 considering that it is not clear what are the real actions and deliverables related to : a) payments # 01 to 13 and contractual amendments (30/03/2006-09/12/2008) with Geoconsult and b) CDM consultancy contract signed with Key Associados on 01/04/2009. Please refer to VVM v.01.2, Para 102 (b) and "Guidelines on the demonstration and assessment of prior consideration of the CDM" EB 62 Annex 13, paragraph 6(b).*

The DOE has validated that, for the proposed project activity, the sequence of events which confirm that continuing and real actions were taken by the PP in parallel with project implementation during the period of 20/01/2005 - 04/03/2011 in order to secure CDM status, as follows:

a) Geoconsult: Geoconsult is a consultancy company owned by Professor Gylvan Meira in Brazil. Professor Meira was contracted in 2005 as a CDM expert advisor to V&M to conduct its actions for e.g. submitting a new industrial methodology to the UNFCCC. His role as a consultant was more of an intellectual kind, with intangible deliverables. The list of payments presented in the PDD and Validation Report (payments # 1 to 13) refers to the monthly payments made to Geoconsult in year 2005.

The sequence of contract amendments listed refers to the renewal of Geoconsult advisory contract for the periods 2006, 2007 and 2008. In March 2007, a "Meeting Report for Methodology Assessment-Renewable Reducing Agents in Pig Iron Production" was made in a joint work with Ecosecurities and RSConsultants (Ref/10.1.2/). The presentation, which was delivered on 2-3 March 2007, was verified by the DOE. The name of Professor Gylvan Meira is listed in the presentation, which further confirms (together with the series of payments made by V&M to Geoconsult – these were also verified by the DOE) that the CDM consultant was involved in the ongoing work regarding the development of the methodology and forest management for renewable reducing agent production (through dedicated forest plantations and renewable charcoal production).

The name of Professor Gylvan Meira/Geoconsult is also evidenced in the document mentioned below (in response letter "b"), which was prepared by Key Associados in January 2010. Page 6 in the referred document (Ref/10.2.2/) mentions the involvement of Geoconsult in the development of the methodology. Key Associados and Geoconsult are totally independent consulting companies,

which in the DOE's opinion, further confirm the ongoing work done by Geoconsult since the project's inception.

b) Key Associados: it is a consultancy company contracted in 2009 to assess the potentiality of V&M's carbon projects in terms of emission reductions, including the proposed industrial project activity (Ref/10.2/). An assessment on the company's potential projects was made on 25th January 2010 and the DOE has confirmed this through document review (Ref/10.2.2/).

In 2011 Plantar Carbon Ambiental was contracted as a consultant to lead the development and registration of the V&M Group's carbon project activities.

It is important to mention that the proposed methodology "NM0278: Use of Charcoal from Renewable Biomass Plantations as Reducing Agent in Pig Iron Mill in Brazil." (27th June 2008) was put under review and finally approved as AM0082: "Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system" on 16th July 2009. The DOE acknowledges that this piece of information (i.e. regarding NM0278) was missing in the project's implementation timeline presented in the Validation Report.

In summary, the CDM related actions during the period 20/01/2005 - 04/03/2011, are presented below:

Date	CDM related action/event	Reference documents
20/01/2005 – 09/12/2008	Contracts, amendments and series of payments made by V&M (PP) to "Geoconsult"/Prof. Gylvan Meira. The documents listed in the Validation Report Section 3.7.1.1 for the work conducted by Geoconsult were all verified by the DOE. The DOE considers that the payments made, together with the additional information herewith provided and the scope of the contracts, further confirm that "Geoconsult"/ Prof. Gylvan Meira were involved in the methodology and project design since its inception.	Ref/10.1/
02/03/2007	"Meeting Report for Methodology Assessment: Renewable Reducing Agents in Pig Iron Production" was made in a joint work with "Ecosecurities" and "RSConsultants". The name of "Geoconsult"/Prof. Gylvan Meira is listed as one of the persons who delivered the presentation.	Ref/10.1.2/

02/07/2008	NM0278: “Use of Charcoal from Renewable Biomass Plantations as Reducing Agent in Pig Iron Mill in Brazil” was submitted on that date.	CDM website
01/04/2009	Contract signed with “Key Associados” for CDM related activities	Ref/10.2/
16/07/2009	AM0082: "Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system" is approved an valid from this date onwards.	CDM website
25/01/2010	Assessment document on the company’s (i.e. PP) potential CDM projects and status of the methodology (finally approved at that time). The document was verified by the DOE and Page 6 of the referred document also mentions the involvement of Geoconsult in the development of the methodology. “Key Associados” and “Geoconsult” are totally independent consulting companies, which in the DOE’s opinion, further confirm the ongoing work done by “Geoconsult” since the project’s inception and the long process which lead to methodology approval.	Ref/10.2.2/
04/03/2011	Consultancy contract signed with “Plantar” (objective: to lead the development and registration of the V&M Group’s carbon project activities)	Ref/10.3/

Based on the above assessment, the DOE hereby confirms that it has validated that continuing and real actions were taken in parallel to project implementation in order to secure CDM status. There is no time gap of two years or more in the series of events/actions taken to secure the CDM status. The DOE confirms that the validation is done in line with “VVM v.1.2, paragraph 102 (b)” and “Guidelines on the demonstration and assessment of prior consideration of the CDM” EB 62 Annex 13, paragraphs 6(b) and 7. The DOE has assessed the mentioned evidences and confirm them to be reliable and authentic.

Confident that the above comments will support you to address the issues raised and the comments and response provided above, the DOE remains available at any time for additional clarification. (please see next page for signature and date)
São Paulo, 11/06/2013

Local Product Manager
GHG Team leader Verifier