VERIFICATION REPORT

JIANGXI PROVINCE LE'AN COUNTY FOREST FARM CARBON SINK PROJECT

Document Prepared By Bureau Veritas Certification

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Prepared By	Bureau Veritas Certification Holding SAS
Contact	62/71 Boulevard du Château, 92571 Neuilly Sur Seine Cdx - France
Approved By	Mr. Robin Wang Jing
Work Carried Out By	Mr. Liao Ling (Team Leader) Ms. Coco Geng Yan (Team Member)

Summary:

Bureau Veritas Certification has conducted the verification of Jiangxi Province Le'an County Forest Farm Carbon Sink Project, owned by Beijing Shengdahuitong Carbon Management Co., Ltd., which is located in Le'an County, Jiangxi Province of P. R. China, and applying the VCS methodology VM0010 version 1.2, on the basis of Voluntary Carbon Standard (VCS) Version 3.3, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The verification scope is defined as an independent and objective review and ex-post determination of the monitored GHG emission reductions, and consisted of the following three phases: i) desk review of the project design, the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in the validated VCS project description. The forestry management conversion includes 7,746.7 ha *logged to Protected Forest* (LtPF) spreading over Jinzhu department, Zhaoxie department, Zengtian department, Niutian department, Shipi department, Gongxi department; Huping Harvest-Nuture department, Shipi Harvest-Nuture department and Zhaoxie Harvest-Nuture department are protected as non-commercial forestry. The monitoring system is in place and reduce the GHG emissions as anthropogenic GHG removals by sinks. The GHG emission removals by sinks verified totalize 90,546 tons of CO_2e for the monitoring period.

Our opinion relates to the projects' GHG emissions and resulting GHG emission reductions reported and related to the valid project baseline, monitoring plan and its associated documents.

Our opinion relates to the projects' actual net GHG removals by sinks and resulting net anthropogenic GHG removals by sinks is reported and related to the valid and registered project baseline, monitoring plan and its associated documents.

Reporting period	01/01/2006 to 31/12/2009
Baseline net GHG removals by sinks	97,522 t CO_2 equivalents.
Actual net GHG removals by sinks	-20070.50 t CO_2 equivalents.
GHG emissions due to leakage	0 t CO_2 equivalents.
Total number of credits withheld in VCS buffer account	27046.16 CO_2 equivalents.
Net anthropogenic GHG removals by sinks	90,546 t CO_2 equivalents.

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1 INTRODUCTION

1.1 Objective

Beijing Shengdahuitong Carbon Management Co., Ltd. (hereafter referred to as "the PP") has commissioned Bureau Veritas Certification to verify the emission removals of the Jiangxi Province Le'an County Forest Farm Carbon Sink Project (hereafter referred to as "the Project") owned by Beijing Shengdahuitong Carbon Management Co., Ltd., which is located in Le'an County, Jiangxi Province of P. R. China for the period from 01/01/2006 to 31/12/2009.

Bureau Veritas Certification as the validation/verification body (VVB) of the Project has been accredited as a DOE by UNFCCC and also meets the competence requirements as set out in ISO 14065:2007.

The objective of verification is to verify the reported voluntary emission removals generated by the Project for the period from 01/01/2006 to 31/12/2009 and to confirm that actual monitoring systems and procedures are in compliance with that described in the monitoring plan and the additional requirements stated by the VCS Association (VCSA).

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of the VCS project description (VCS-PD), the project's baseline study and monitoring plan, VCS monitoring report (VCS-MR) and other relevant documents. The information in these documents is reviewed against VCS version 3.3 requirements, UNFCCC rules and associated interpretations.

The verification is not meant to provide any consulting towards the client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3 Level of Assurance

Bureau Veritas Certification has undertaken a reasonable assurance engagement in accordance with VCS version 3.3. It requires a reasonable level of assurance in verification that GHG assertions are free of material errors, omissions and misrepresentations. The verification conclusion is based on the VCS-PD, VCS-MR, CDM-PDD, supporting evidences made available to the verifier and information collected through performing interviews and during the on-site inspection.

1.4 Summary Description of the Project

The Project is located in Le'an County, Jiangxi Province of P. R. China, with the geo-coordinate range of 26.83°N-27.75°N and 115.58°E-116.17°E. The annual estimated emission removals are 73,539 tCO_2e.

The Project involves 7,746.7 ha logged to Protected Forest (LtPF) project which belongs to the improvement forestry management (IMF). It applies methodology *VM0010 version 1.2* "*Methodology for Improved Forest Management: Conversion of Logged to Protected Forest*". The protected species are Chinese Fir and Slash Pine.

According to the Government-approved timber management plan, the LtPF area is identified as 7,746.7 ha.

The Project Start Date is 01/01/2006, when the forest protection contract signed between the local government and the forest farms took into effect.

Project title:	*Jiangxi Province Le'an County Forest Farm Carbon* Sink Project
VCS Monitoring period:	*01/01/2006 to 31/12/2009*
Project Proponents:	*China (host): Beijing Shengdahuitong Carbon Management Co., Ltd.*
Methodologies used:	*VM0010 version 1.2*
Location of the Project:	*Le'an County, Jiangxi Province of P. R. China*
Geo coordinates:	*26.83°N-27.75°N and 115.58°E-116.17°E*

2 VERIFICATION PROCESS

2.1 Method and Criteria

The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

Bureau Veritas Certification verified the project against the requirements set in VCS version 3.3 (/42/).

2.2 Document Review

The assessment of the project documentation provided by the project participant is based upon both quantitative and qualitative information on emission reductions. Quantitative information comprises the reported numbers in the VCS monitoring report (MR) version 04 dated 10/04/2014 and emission reduction calculation spreadsheet version 04 dated 10/04/2014. Qualitative information comprises information on internal management controls, calculation procedures, procedures for transfer of data, frequency of emissions reports, and review and internal audit of calculations.

In addition to the monitoring documentation provided by the project proponents, the VVB reviews:

(a) The VCS-PD and the monitoring plan;

(b) The validation report

(c) The applied monitoring methodology;

(d) Other information and references relevant to the project activity's resulting emission reductions (e.g. IPCC reports, 3rd party measurement reports or national regulations).

2.3 Interviews

During 13/01/2013 to 18/01/2013, Bureau Veritas Certification performed a site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Beijing Shengdahuitong Carbon Management Co., Ltd. and DTM (Beijing) Energy Technology Development Co., Ltd. were interviewed (see References). The main topics of the interviews are summarized in Table 2.

Table 1 Interview topics

Interviewed organization	Interview topics
Beijing Shengdahuitong Carbon Management Co., Ltd. (the Project Owner)	➢ Project Description and implementation ➢ Technical equipment, calibration and operation ➢ Monitoring Plan and management procedures ➢ Monitoring data ➢ Data uncertainty and residual risks (QA/QC) ➢ Environmental Impacts ➢ Compliance with National Laws and Regulations
DTM (Beijing) Energy Technology Development Co., Ltd. (the Consultant)	➢ Monitoring Plan ➢ Monitored data and Monitoring Report ➢ GHG Calculations

2.4 Site Inspections

During 13/01/2013 to 18/01/2013, Bureau Veritas Certification performed a site visit and interviews with project stakeholders; during the site visit, Bureau Veritas Certification visited all department of the Project, include Jinzhu department, Zhaoxie department, Zengtian department, Niutian department, Shipi department, Gongxi department; Huping Harvest-Nuture department, Shipi Harvest-Nuture department and Zhaoxie Harvest-Nuture department.

2.5 Resolution of Findings

The objective of this phase of the verification is to resolve issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the project activity to achieve emission removals or influence the monitoring and reporting of emission removals prior to Bureau Veritas Certification's positive conclusion on the GHG emission removals calculation.

Findings established during the verification can either be seen as a non-fulfilment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.

A Corrective Action Request (CAR) is raised, if one of the following situations occurs:

(a) Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;

(b) Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;

(c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;

(d) Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

A Clarification Request (CL) is raised, if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

A Forward Action Request (FAR) is raised, for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in Appendix A.

2.5.1 Forward Action Requests

No Forward Action Request is raised during this monitoring period.

2.6 Eligibility for Validation Activities

N/A, Bureau Veritas Certification as the validation/verification body (VVB) of the Project has been accredited as a DOE by UNFCCC and also meets the competence requirements as set out in ISO 14065:2007.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

N/A, the project has not been registered, or is seeking registration under any other GHG programs.

3.2 Methodology Deviations

N/A, no deviation from methodology.

3.3 Project Description Deviations

N/A, no deviation from project description in the VCS PD version 04 dated 10/04/2014.

3.4 Grouped Project

N/A, the project is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

Bureau Veritas Certification has performed a site visit and found that the Project has been implemented since 01/01/2006, on which the forest protection contract signed between the local government and the forest farms took into effect. On the basis of this site visit and the reviewed project description it can be confirmed that, the improved forestry management, such as conversion of logged to protection forest (Protected species are: Slash Pine and Chinese Fir) are implemented. The forestry management conversion includes 7,746.7 ha logged to Protected Forest (LtPF). The different forest types, as well as the monitoring system, metering equipment and the monitoring procedure have been implemented and managed as described in the VCS PD.

Bureau Veritas Certification has onsite checked the boundary of the Project and confirmed they are consistent with those stated in the VCS PD.

No changes to the project design have been identified during this verification. The implementation and operation of the project activity have been conducted in accordance with the description contained in the VCS PD.

According to the Forest management and protected agreement signed between the local forest bureau and the forest farm (/24/), the Project has been implemented since 01/01/2006, on which the forest protection contract signed between the local government and the forest farms took into effect.

4.2 Accuracy of GHG Emission Reduction and Removal Calculations

Monitoring has been carried out in accordance with the monitoring plan contained in the VCS PD.

[Parameters and information flow]

The parameters required by the monitoring plan and how Bureau Veritas Certification has verified the information flow (from data generation, aggregation, to recording, calculation and reporting) and appropriateness of the applied measurement / determination method, the correctness of the values applied for emission removals calculation, the accuracy, and applied QA/QC measures for all relevant monitoring parameters including the values in the monitoring report are described below:

Parameters monitored:

1) Illegal Logging PRA Results;

   The value is zero since there are clear infrastructure, hiring and policies are in place to prevent illegal logging. Bureau Veritas Certification has checked the Questionnaires and records of Participatory rural appraisal (PRA) of the communities in and surrounding the project area carried out in 2006, 2007, 2008 and 2009 and confirmed the value applied is consistent with the methodology.

2) Result of Limited Illegal Logging Survey;

   The value is zero since there are clear infrastructure, hiring and policies are in place to prevent illegal logging.

3) A_i: Area covered by stratum i

   According to the Timber Harvest Plan, there are 1272.67 ha Chinese Fir with the ages from 16 to 19 in 2005 which would be harvested under the baseline scenario but are protected under the project scenario, therefore only the carbon sink by these 1272.67 ha Chinese Fir are accounted in this monitoring period.

4) DBH, Diameter at breast height of a tree in cm

   This parameter was measured during the Forest management inventory carried out in 2009 and completed in Jan 2010, field measurements in sample plots and records are recognized by local government forestry bureau (/19//20/). During site visit, Bureau Veritas Certification has sample checked the diameter of each department and confirmed the records of Forest management inventory carried out in 2006 and in Jan 2010 were reliable.

5) N, Total number of possible sample plots within the project boundary (the sampling space or the population);

   The value is 17, this is consistent with the actual situation.

6) W_i: Relative weight of the area of stratum i; dimensionless;

   This parameter is determined in accordance with the tool for the "Calculation of the number of sample plots for measurements within A/R CDM project activities" (version 02.1.0) approved by the CDM Executive Board. (/12/)

7) S_i, Estimated standard deviation of biomass stock in stratum i. Standard deviation of biomass stock per unit area (in t d.m. ha-1) may also be used for this purpose;

   This parameter is determined in accordance with the tool for the "Calculation of the number of sample plots for measurements within A/R CDM project activities" (version 02.1.0) approved by the CDM Executive Board. (/12/)

8) $A_{burn,i,t}$ Area burnt in stratum i at time t

   N/A, no forest of the Project burnt during this monitoring period.

9) $A_{dist,i,t}$, Area disturbed in stratum i at time t

   N/A, no forest of the Project disturbed during this monitoring period.

10) $A_{DIST\_IL,i}$: Area potentially impacted by illegal logging in stratum i

    N/A, no forest of the Project will be disturbed during this monitoring period.

11) $C_{DIST\_IL,i,t|PRJ}$: biomass carbon of trees cut and removed through illegal logging in stratum i at time t

    N/A, no illegal logging during this monitoring period.

12) AP_i: Total area of illegal logging sample plots in stratum i

    N/A, no illegal logging during this monitoring period.

13) PMP_i: Merchantable biomass as a proportion of total aboveground tree biomass for stratum i within the project boundaries

    N/A, no merchantable volume of timber in the forest during this monitoring period.

Parameters determined ex-ante:

1) $V_{l,j,i,sp,}$ Merchantable volume for tree l of species j in sample plot spin stratum l, sourced from Forest inventory by local forest bureau and Calculated from equations linking diameter at breast height, which has been determined in the VCS PD.

2) CF_j, Carbon fraction of dry matter for species j

   The value is 0.5, which is the default value from VM0010 version 1.2.

3) D_j, Basic wood density of species j in t d.m. m^{-3}

   The value for Chinese Fir is 0.307, and for Slash Pine is 0.38, which are the national species-specific values for Forestry Part of China's greenhouse gas emissions list. Ecological Environmental Institute. Chinese Academy of Forestry (National GHG inventory). Only D_j of Chinese Fir is used in this monitoring period.

4) $f_j(X,Y…)$, Allometric equation(s) for species j linking measured tree variable(s) to aboveground biomass of living trees
   Equations used by local forest bureau during the forest inventory are derived using a wide range of measured ages based on datasets that comprise at least 30 trees. Equations are based on statistically significant regressions and the r^2 is ≥ 0.8.

   The source of equations are chosen from academic paper and equations developed for regional forest types.

5) $BCEF_R$, Biomass conversion and expansion factor applicable to wood removals in the project area

6) The value for Chinese Fir is 0.53418, and for Slash Pine is 0.5852, which are the national species-specific values for Forestry Part of China's greenhouse gas emissions list. Ecological Environmental Institute. Chinese Academy of Forestry (National GHG inventory). Only $BCEF_R$ of Chinese Fir is used in this monitoring period.

7) OF, SLF,WW,

   OF = Fraction of wood products that will be emitted to the atmosphere between 5 and 100 years after production;

   SLF = Fraction of wood products that will be emitted to the atmosphere within 5 years of production; and

   WW = Fraction of extracted biomass effectively emitted to the atmosphere during production

   The values are sourced from VM0010 version 1.2.

8) RGR_i, Forest re-growth rate post timber harvest for stratum i m

   The values are sourced from VM0010 version 1.2.

9) $V_{EX,j,i|BSL}$, Mean volume of extracted timber per unit area for species j in stratum i

10) $TH_{i,p}$, Number of years since timber harvest in stratum I in land parcel p;

    The values are sourced from the timer plan.

11) $A_{i,p}$, Area covered by stratum I over land parcel p

    The values are consistent with the Forestry Right Certificates of the Project. (/16/)

12) $A_{1,i,p}$: The area of stratum i in land parcel p that was harvested 1 year ago

The values are consistent with the Forestry Right Certificates of the Project. (/16/)

13) $A_{2\text{-}10,i,p}$: The area of stratum i in land parcel p that was harvested between 2 and 10 year ago

The values are consistent with the Forestry Right Certificates of the Project. (/16/)

14) $A_{11\text{-}20,i,p}$: The area of stratum i in land parcel p that was harvested between 11 and 20 year ago

The values are consistent with the Forestry Right Certificates of the Project. (/16/)

15) A_{t^*}: Cumulative area harvested until time t*

The values are consistent with the Forestry Right Certificates of the Project. (/16/)

16) A_{sp}, Area of sample plot

The values are consistent with Statement regarding the Forest management inventory issued by Jiangxi Province Le'an County Forestry Bureau in Jan 2013. (/20/)

17) t_{VAL}, Two-sided Student's t-value, at infinite degrees of freedom in the first iteration and at degrees of freedom equal to (n-1) in subsequent iterations, for the required confidence level; dimensionless;

The values are sourced from A/R Methodological Tool "Calculation of the number of sample plots for measurements within A/R CDM project activities".

18) E, Acceptable margin of error (i.e. one-half the confidence interval) in estimation of biomass stock within the project boundary; in units used for S_i

The value is sourced from A/R Methodological Tool "Calculation of the number of sample plots for measurements within A/R CDM project activities".

19) G_{gi} Emission factor for stratum i for gas g

The value of this parameter is sourced from IPCC 2006.

20) $V_{EX,j,i|BSL}$, Mean volume of extracted timber per unit area for species j in stratum I;

The timber harvest plan sets the allowable mean extracted volume is equal to the merchantable volume of timber in the forest inventory ($V_{j,i|BSL}$).

[Assessment data and calculation]

A complete set of data for the specified monitoring period is available.

The critical parameter used for the determination of the Emission Removals is the area of forest, number of plant, diameter at breast height of a tree and other parameters relate to the forest inventory. The data pertaining to the above parameters are maintained in the identified records. All the data are in compliance with that stated in the Monitoring Report version 04.

[Baseline emissions]
According to the methodology and the VCS PD, the net change in carbon stock from wood products and logging slash across all parcels within the first year of harvest in the baseline is calculated as:

$$\Delta C_{NET|BSL(1)} = \sum_{i,p} A_{1,i,p} * \sum_{i=1}^{M} (C_{DWSLASH,i,p\backslash BSL}/10) + C_{WP0,i,p\backslash BSL} + (C_{WP100,i,p\backslash BSL}/20)$$

The net change in carbon stock from wood products and logging slash across all parcels the years 2-10 since harvest in the baseline are calculated as:

$$\Delta C_{NET|BSL(2-10)} = \sum_{i,p} A_{2-10,i,p} * \sum_{i=1}^{M} \left(\frac{C_{DWSLASH,i,p\backslash BSL}}{10}\right) + \left(\frac{C_{WP100,i,p\backslash BSL}}{20}\right)$$

The net change in carbon stock from wood products across all parcels the years 11-20 since harvest in the baseline are calculated as:

$$\Delta C_{NET|BSL(11-20)} = \sum_{i,p} A_{11-20,i,p} * \sum_{i=1}^{M} (C_{WP100,i,p\backslash BSL}/20)$$

The net change (sequestration) in carbon stock due to forest regrowth across all parcels in all years since harvest in the baseline scenario are calculated according to equation 6 below. Note that there will be no more emissions quantified from decay of logging slash or wood products.

$$\Delta C_{NET|BSL(1+)} = \sum_{i} A_{t*} * \sum_{i=1}^{M} (-\Delta C_{RG,i,p\backslash BSL})$$

The calculation of A_{t*}, is cumulative area harvested until time t* since timber harvest in stratum i in land parcel p in the baseline scenario. In the estimation of baseline emissions, it is relevant to the rotation of the different kinds of trees and it could be calculated by MAX (Age_{2006} +30 –$Years_{since\ harvest\ to\ year\ t}$, 0) during the whole crediting period.

Therefore, net change in carbon stock across all parcels harvested over each year of the project crediting period in the baseline scenario since the start of the project activity is calculated as:

$$\Delta C_{NET|BSL,t*} = \sum_{p=1}^{P} \Delta C_{NET|BSL(1)} + \Delta C_{NET|BSL(2-10)} + \Delta C_{NET|BSL(11-20)} + \Delta C_{NET|BSL(1+)}$$

The net carbon stock change in the baseline scenario since the start of the project activity must be converted to net greenhouse gas emissions and is calculated as:

$$GHG_{NET|BSL,t*} = \Delta C_{NET|BSL,t*} * \frac{44}{12}$$

Here t* is 4 years for the time elapsed since the start of the project to 31/12/2009.

Bureau Veritas Certification has checked the Emission Removals calculation sheet and found the calculation is correct, and the results are:

$$\boldsymbol{GHG_{NET|BSL,4} = 97,522 tCO2e}$$

[Project emissions]

According to the methodology and the VCS PD, net greenhouse gas emissions in the project scenario in year t, is calculated as the formula below:

$$\Delta C_{NET,t|\mathrm{PRJ}} = \left(\Delta C_{DIST_{FR},t|PRJ} + \Delta C_{DIST,t|PRJ} + \Delta C_{DIST_{IL},t|PRJ}\right) - \Delta C_{AB,t|PRJ}$$

The net greenhouse gas emissions across in the project scenario since the start of the project activity is calculated as:

$$GHG_{NET|PRJ} = \sum_{t=1}^{t^*} \Delta C_{NET,t|PRJ}$$

According to the PRA implemented in 2006 to 2009, $\Delta C_{DIST\_FR,t|PRJ}$, $\Delta C_{DIST,t|PRJ}$and $\Delta C_{DIST\_IL,i,t|PRJ}$ are all zero.

The annual carbon stock change in aboveground biomass of trees in year t is the difference in mean carbon stock in aboveground biomass between sampling events and, when expressed in tCO_2e, is calculated as:

$$\Delta C_{AB,t|PRJ} = \left(\sum_{i=1}^{M} \left(A_i * \frac{C_{AB,i,t2|PRJ} - C_{AB,i,t1|PRJ}}{T}\right)\right) * \frac{44}{12}$$

Bureau Veritas Certification has checked the Emission Removals calculation sheet and found the calculation is correct, and the results are

$$GHG_{NET|PRJ} = -20070.50\mathrm{tCO2e}$$

[Leakage emissions]

Activity shifting leakage

According to VM0010 ver 1.2, there may be no leakage due to activity shifting. This was demonstrated through:

- verified the historical records of Forestry Right Certificates of the Project dated 2001 (/16/), and the Field measurement of Forest management inventory of Jiangxi Province Le'an County Forest Farm Carbon Sink Project carried out in 2005 and 2009 (/19/), all the lands controlled by the project proponent where leakage could occur, including at a minimum, their locations, area and type of existing land uses were not materially changed showing no deviation from historical trends.

- verified the forest management plans from 2001 to 2005 *(/45/)*, which were ⩾24 months prior to the start of the project showing harvest plans on all owned/managed lands paired with records from the with-project time period shows no deviation from management plans.

Bureau Veritas Certification has verified the project proponent controls other lands of the forest type of broad leaf, which was the different forest type from Chinese fir and slash pine. Then no shift activity would occur. Furthermore, during the site visit by Bureau Veritas Certification for the validation and verification, the representative of the local Forest Bureau indicated that the legally

sufficient timber harvest plan which was approved by the forest government regulated that the harvested location, area and type of existing land uses every year, which were determined by the trees if they reached the age of rotation. If the planned harvest timber in the project area were not implemented, the timber harvest plan in the other lands would not be shifted and then no leakage would be occurred by the project.

Bureau Veritas Certification has also verified the project proponent controls other lands of the forest type of natural broad leaf, which was the different forest type from Chinese fir and slash pine. However, according to the Notice on stipulating the harvesting management of broad leaf of Jiangxi Province (Ganlinzizi[2006]No.146) (/31/), natural broad leaf were forbidden to be harvested and the broad leaf harvest plan would not be issued, which means under the circumstance of conversion from logged to protected forests of Chinese fir and slash pine, no other forests could be shifted under the controls of the project proponent. Therefore, the shift activity would not occur.

Therefore, the activity shifting leakage is zero.

Market leakage

According to the Validation Report version 04 (/6/), the leakage factor for market-effects calculations (LF_{ME}) is 0.

Bureau Veritas Certification has verified the following documents:

- According to the National Forestry Law of P.R. China, the forest concessions must be strictly implemented; (/28/)
- According to the Forestry Law of P.R. China, Illegal logging in China will be faced punished by replanting, penalty, or criminal responsibilities. (/28/)
- In recent years, the illegal logging is absent in China. (/30/)
- The estimated annual extracted volume of the project is only 0.01% of the national extracted volume from 2006 to 2009, the proportion is too tiny, the decreased supply of the timber caused by the project do not impact the total supply within national boundaries. (/4//29/)

Bureau Veritas Certification can confirm that the logging is impossible increased as a result of the decreased supply of the timber caused by the project in this monitoring period.

Therefore,

LF_{ME} = 0.

Hence:

$$\mathbf{GHG_{LK|LtPF,t*}} = \mathbf{LF_{ME}} * \mathbf{GHG_{NET|BSL,t*}} = 0$$

[Emission reductions]

According to VM0010 version 1.2, the Net Project Greenhouse Gas Emission removals in the monitoring crediting period are calculated as:

$$GHG_{CREDITs|LtPF,t*} = GHG_{NET|BSL,t*} - GHG_{NET|PRJ,t*} - GHG_{LK|LtPF,t*}$$

=97,522-(-20070.50)-0=117,592tCO2e

Where:

$GHG_{CREDITS|LtPF}$	project greenhouse gas credits associated with the implementation of improved forest management (IFM) activities in the project scenario, tCO_2e
$GHG_{NET|BSL}$	net greenhouse gas emissions in the baseline scenario in the year t* since the start of the project activity, tCO_2e
$GHG_{NET|PRJ}$	net greenhouse gas emissions in the project scenario in the year t* since the start of the project activity, tCO_2e
$GHG_{LK|LtPF}$	total greenhouse gas emissions due to leakage arising outside the project boundary as a result of the implementation of improved forest management (IFM) activities in the year t* since the start of the project activity, in the project scenario, tCO_2e

According to the VCS PD, if the uncertainty propagation $U_{total|LtPF} \leq 0.15$ then no deduction will result for uncertainty; If $U_{total|LtPF} > 0.15$ then the amount of greenhouse gas emission credits associated with IFM activities will be deducted as follows:

$$Credits_{total|LtPF} = GHG_{credits|LtPF} * (1 - U_{total|LtPF})$$

The uncertainty propagation $U_{total|LtPF}=0.11 \leq 0.15$ in this monitoring period; therefore,

$$Credits_{total|LtPF} = GHG_{credits|LtPF}$$

As per the methodology VM0010 version 1.2 and the VCS PD, the amount of VCU's that can be issued at time t=t2 (the date of verification) for monitoring period T=t2-t1, is calculated as:

$$VCU_{net|LtPF} = \left(Credits_{total,t2|LtPF} - Credits_{total,t1|LtPF}\right) - Bu_{|IFM-VCS}$$

Where:

$VCU_{net|LtPF}$	number of verified carbon units; dimensionless;
$Credits_{total.t1|LtPF}$	net anthropogenic greenhouse gas removals by sinks, as estimated for t*=t1 in tCO_2e;
$Credits_{total.t2|LtPF}$	net anthropogenic greenhouse gas removals by sinks, as estimated for t*=t2 in tCO_2e; and
$Bu_{|IFM-VCS}$	total number of credits withheld in VCS buffer account.

According to the VCS MR, the overall risk rating in this monitoring period is 23, therefore, the amount of VCU in this monitoring period are:

$$VCU_{net|LtPF} = \left(Credits_{total,t2|LtPF} - Credits_{total,t1|LtPF}\right) - Bu_{|IFM-VCS}$$

=117,592 – 0 – 0.23*117,592

= 117,592 – 0 –27046.16

= 90,546 tCO_2e

4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

All necessary documentation is collected, referenced and is easily accessible in hard-copy or electronic format. The data pertaining to the monitored parameters are maintained in the identified internal records and consistent with the values stated in the Monitoring Report version 04. Key data have been cross-checked via external sources, such as records of Filed measurement of Forest management inventory.

4.4 Non-Permanence Risk Analysis

Bureau Veritas Certification has reviewed the Jiangxi Province Le'an County Forest Farm Carbon Sink Project Non-Permanence Risk Report (/44/) and the related evidences, include the Forest management and protected agreement signed between the local forest bureau and the forest farm (/24/), Forest management plan of Jiangxi Province Le'an County Forest Farm Carbon Sink Project (/45/) and records of stakeholder interview (/46/), Bureau Veritas Certification has evaluated the risk assessment undertaken by the project proponent and assess all data, rationales, assumptions, justifications and documentation provided by the project proponent to support the non-permanence risk rating, then Bureau Veritas Certification confirms that the evidences are substantial, and the overall risk rating is 23% based on the provided evidences and the AFOLU Non-Permanence Risk Tool, VCS version 3.3.

5 VERIFICATION CONCLUSION

Bureau Veritas Certification has conducted the verification of Jiangxi Province Le'an County Forest Farm Carbon Sink Project, owned by Beijing Shengdahuitong Carbon Management Co., Ltd., which is located in Le'an County, Jiangxi Province of P. R. China, and applying the VCS methodology VM0010 version 1.2, on the basis of Voluntary Carbon Standard (VCS) Version 3.3, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The verification scope is defined as an independent and objective review and ex-post determination of the monitored GHG emission reductions, and consisted of the following three phases: i) desk review of the project design, the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in the validated VCS project description. The forestry management conversion includes 7,746.7 ha *logged to Protected Forest* (LtPF) spreading over Jinzhu department, Zhaoxie department, Zengtian department, Niutian department, Shipi department, Gongxi department; Huping Harvest-Nuture department, Shipi Harvest-Nuture department and Zhaoxie Harvest-Nuture department are protected as non-commercial forestry. The monitoring system is in place and reduce the GHG emissions as anthropogenic GHG removals by sinks. The GHG emission removals by sinks verified totalize 90,546 tons of CO_2e for the monitoring period.

Our opinion relates to the projects' actual net GHG removals by sinks and resulting net anthropogenic GHG removals by sinks is reported and related to the valid and registered project baseline, monitoring plan and its associated documents.

Verification period: From 01/01/2006 to 31/12/2009

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Total number of credits withheld in VCS buffer account (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
01/01/2006 to 31/12/2009	97,522	-20070.50	0	27046.16	90,546
Total	97,522	-20070.50	0	27046.16	90,546

6 REFERENCE

/1/ VCS-PD version 04 dated 10/04/2014

/2/ VCS-MR version 01 dated 13/12/2012

/3/ VCS-MR version 04 dated 10/04/2014

/4/ ER Calculation Spreadsheet 04 dated 10/04/2014

/5/ Plot and Uncertainty Calculator of Jiangxi Province Le'an County Forest Farm Carbon Sink Project

/6/ Validation Report version 04, dated 21/04/2014

/7/ VM0010 version 1.2 dated 27/03/2013

/8/ VCS Standard version 3.3 dated 04/10/2012

/9/ Agriculture, Forestry and Other Land Use (AFOLU) Requirements Version 3.3

/10/ Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities" (VT0001 VCS AFOLU Additionality Tool v3.0) dated 01/02/2012

/11/ AFOLU Non-Permanence Risk Tool, VCS version 3

/12/ Tool for the "Calculation of the number of sample plots for measurements within A/R CDM project activities" (version 02.1.0) approved by the CDM Executive Board.

/13/ Valid and verifiable Government-approved timber management plan for harvesting the project area

/14/ Business license of the project proponent

/15/ Historical management records more than 5 years of the local forestry farm which contract with the Project proponent

/16/ Forestry Right Certificates of the Project dated 2001

/17/ Ecological forestry application materials and the certification from local forest government

/18/ Maps of the Project issued from local forestry government

/19/ Field measurement of Forest management inventory of Jiangxi Province Le'an County Forest Farm Carbon Sink Project carried out in 2005 and 2009

/20/ Statement regarding the Forest management inventory issued by Jiangxi Province Le'an County Forestry Bureau in Jan 2013

/21/ Questionnaires and records of Participatory rural appraisal (PRA) of the communities in and surrounding the project area carried out in 2006 to 2009

/22/ http://v-c-s.org

/23/ Ecological regulations of Jiangxi Province

/24/ Forest management and protected agreement signed between the local forest bureau and the forest farm

/25/ Collecting of Woods-raising fund and Maintenance of Simple Reproduce Fee management regulation of Jiangxi Province

/26/ National level poverty-stricken counties list

/27/ The national forestry inventory (II) in 2005

/28/ National Forestry Law of China

/29/ Notice of the review opinion approved by the State Council which about the year's forest harvest limit in the 11th Five-year in all regions reported by State Forest Bureau (Guofa[2005]No.41)

/30/ Speech of the director of State Forestry Bureau at the national forestry department director session

/31/ Notice on stipulating the harvesting management of broad leaf of Jiangxi Province (document code: Ganlinzizi[2006]No.146)

/32/ Tool for calculation of the number of sample plots for measurements within A/R CDM project activity

/33/ http://www.gov.cn/gongbao/content/2009/content_1265996.htm

/34/ Technical guidelines for national forest inventory. SFA 2004 No.25

/35/ Allometric equations for Jiangxi Province of the Chinese Fir published in academic papers

/36/ Allometric equations for Jiangxi Province of the Slash Pine published in academic papers

/37/ Field survey records of the Project conducted by Bureau Veritas Certification

/38/ IPCC Guidelines for National Greenhouse Gas Inventories (2006), Table 4.9.

/39/ Historical Sale Receipts of the Wood

/40/ "Economic Evaluation Method and Parameters for Project Construction" (version 3)

/41/ http://www.jxly.gov.cn/zwgk/fzgh/sjgh/201112/t20111215_61299.htm

/42/ History of support regulations on the central Soviet area http://finance.ifeng.com/news/region/20120710/6730207.shtml

/43/ Email from VCS Association to grant this project an *extension to the validation deadline until 25 November 2013*

/44/ Jiangxi Province Le'an County Forest Farm Carbon Sink Project Non-Permanence Risk Report version 01 dated 12-10-2013

/45/ Forest management plan of Jiangxi Province Le'an County Forest Farm Carbon Sink Project

/46/ Records of stakeholder interview dated 15/01/2012

Persons interviewed:

	Beijing Shengdahuitong Carbon Management Co., Ltd.	
/1/	Mr. Yuan Ye	Project Manager
/2/	Mr. Peng Tingxuan	Project Manager
/3/	Mr. Wang Zhiguo	Project Manager
/4/	Mr. Yi Da	Project Manager
	DTM (Beijing) Energy Technology Development Co., Ltd.	
/5/	Ms. Tao Yun	Director
/6/	Ms. Cui Fangyu	Project Manager
/7/	Mr. Li Xiao Feng	Project Manager
	Le'an Forest Government	
/8/	Mr. Zhan Misheng	Vice Director
	Local Forest Farm	
/9/	Mr. Wen Tao	General Technical Manager
/10/	Mr. Liu Zhihua	General Technical Manager
/11/	Mr. Yuan Guohuan	Forest nursy

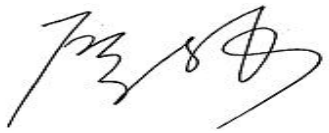
7 CURRICULUM VITAE OF THE VALIDATION TEAM MEMBER

Mr. Liao Ling	Bureau Veritas Certification, China	Team Leader, Climate Change Lead Verifier, He holds a Bachelor Degree in Atmosphere Science. Before joining BV in 2008, he gained 2 years of technical working experience of CDM in P.R China. He obtained the certificate of CDM Verifier and Lead Auditor for EMS ISO 14001. He has completed the course assessment for the ISO 14064:2006.
Ms. Coco Geng Yan	Bureau Veritas Certification, China	Team Member, Climate Change Lead Verifier. She holds a Master Degree in Ecology and a bachelor degree in Forestry. She has 2 years of experience in CDM in P.R China. She obtained the certificate of CDM Verifier in 2010, Lead Auditor for ISO 14001 and has successfully completed the course assessment for ISO 14064.
Mr. Yang Jiaming	Bureau Veritas Certification, China	Technical Reviewer, Climate Change Lead Verifier. He holds a Master and Engineer Degree in Wood Science and Technology. Before joining BV in Mar 2011, he gained almost two years of audit experience Wood Trading industry. He obtained the certificate of Lead Auditor for ISO9001 and has successfully completed the works related of FSC, PEFC and national forestry programs.

Mr. Yang Jiaming

Internal Technical Reviewer

21/04/2014



Mr. Liao Ling

Team Leader

21/04/2014

APPENDIX A: RESOLUTION OF CORRECTIVE ACTION /CLARIFICATION / FORWARD ACTION REQUESTS

Draft report clarifications and corrective action requests by verification team	Summary of project participant response	Verification team conclusion
CL 1 Please specify the data source of parameter $V_{l,j,i,sp}$	The parameter $V_{l,j,i,sp}$ is sourced from Forest inventory by local forest bureau and Calculated from equations linking diameter at breast height.	The source of parameter $V_{l,j,i,sp}$ has been specified in the MR and consistent with the VCS PD and actual situation; hence CL 1 is closed.
CL 2 The comment in "any comment" of monitored parameter "Illegal Logging PRA Results" should be based on the actual situation.	The comment has been updated, the reason of selection of value as zero has been specified in the comment.	The reason is consistent with local and national regulations; hence CL 2 is closed.
CL 3 Please explain clearly the measurement method of parameter DBH in the MR.	The measurement method has been explained clearly in the MR, i.e. Typically measured 1.3m aboveground. Measure all trees above some minimum DBH in the sample plots. The minimum DBH varies depending on tree species and climate; for instance, the minimum DBH may be as small as 2.5 cm or as high as 20 cm, but for humid tropical forests 10 cm is commonly used. Minimum DBH employed in inventories is held constant for the duration of the project.	The measurement method and procedures are in accordance with forestry industrial common practice; hence CL 3 is closed.