



BUREAU  
VERITAS

# VERIFICATION REPORT

DTEK MINE KOMSOMOLETS DONBASSA,  
PUBLIC JOINT-STOCK COMPANY

VERIFICATION OF THE  
CMM UTILISATION ON THE JOINT STOCK  
COMPANY NAMED KOMSOMOLETS DONBASSA  
COAL MINE OF DTEK (DONBASSKAYA  
TOPLIVNAYA ENERGETICHESKAYA KOMPANYA)

FOR THE PERIOD 01/07/2011 TO 30/06/2012

**REPORT No. UKRAINE-VER/0535/2012**

REVISION No. 02

BUREAU VERITAS CERTIFICATION




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 VERIFICATION REPORT
 

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Date of first issue: 31/08/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: DTEK Mine Komsomolets Donbassa, Public Joint-Stock Company	Client ref.: Kostyantyn Vyaly

## Summary:

Bureau Veritas Certification has made the 4th periodic verification for the period 01/07/2011 to 30/06/2012 of the "CMM utilisation on the Joint Stock Company named Komsomolets Donbassa Coal Mine of DTEK (Donbasskaya Toplivnaya Energeticheskaya Kompanya)", JI Registration Reference Number 0079, project of DTEK Mine Komsomolets Donbassa Public Joint-Stock Company located in Kirovske city, Donetsk region, Ukraine, and applying the methodology ACM0008 version 03, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The verification scope is defined as a periodic independent review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the project design and 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.

The first output of the verification process is a list of Clarification, Corrective Action Requests, Forward Action Requests (CL, CAR and FAR), presented in Appendix A.

In summary, Bureau Veritas Certification confirms that the project is implemented as per determined changes. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 137 565 tonnes of CO<sub>2</sub> equivalent for the monitoring period from 01/07/2011 to 30/06/2012.

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

Report No.: UKRAINE-ver/0535/2012	Subject Group: JI	
Project title: "CMM utilisation on the Joint Stock Company named Komsomolets Donbassa Coal Mine of DTEK (Donbasskaya Toplivnaya Energeticheskaya Kompanya)"		
Work carried out by: Vyacheslav Yeriomin : Team Leader Volodymyr Kulish : Team Member		
Work reviewed by: Ivan Sokolov – Internal Technical Reviewer Sergiy Kustovskyy – Technical Specialist		
Work approved by: Ivan Sokolov – Operational Manager		
Date of this revision: 17/09/2012	Rev. No.: 02	Number of pages: 30

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## 1 INTRODUCTION

DTEK Mine Komsomolets Donbassa Public Joint-Stock Company has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “CMM utilisation on the Joint Stock Company named Komsomolets Donbassa Coal Mine of DTEK (Donbasskaya Toplivnaya Energeticheskaya Kompanya)” (hereafter called “the project”) at Kirovske city, Donetsk region, Ukraine.

This report summarizes the findings of the verification of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The verification covers the period from 01/07/2011 to 30/06/2012.

### 1.1 Objective

Verification is the periodic independent review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period.

The objective of verification can be divided in Initial Verification and Periodic Verification.

UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

### 1.2 Scope

The verification scope is defined as an independent and objective review of the project design document, the project’s baseline study, monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

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

### 1.3 Verification Team

The verification team consists of the following personnel:

Vyacheslav Yeriomin Bureau Veritas Certification	Team Leader, Climate Change Verifier
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Volodymyr Kulish Bureau Veritas Certification	Climate Change Verifier
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This verification report was reviewed by:

Ivan Sokolov  
Bureau Veritas Certification, Internal Technical Reviewer

Sergiy Kustovskyy  
Bureau Veritas Certification, Technical Specialist

## 2 METHODOLOGY

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

In order to ensure transparency, a verification protocol was customized for the project, according to the version 01 of the Joint Implementation Determination and Verification Manual, issued by the Joint Implementation Supervisory Committee at its 19 meeting on 04/12/2009. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from verifying the identified criteria. The verification protocol serves the following purposes:

- It organizes, details and clarifies the requirements a JI project is expected to meet;
- It ensures a transparent verification process where the verifier will document how a particular requirement has been verified and the result of the verification.

The completed verification protocol is enclosed in Appendix A to this report.

### 2.1 Review of Documents

The Monitoring Report (MR) submitted by DTEK Mine Komsomolets Donbassa PJSC and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), Approved CDM methodology ACM0008 and Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version 1 dated 24/07/2012, version 2 dated 15/08/2012, revised Monitoring Plan version 3 dated 23/08/2011, version 4 dated 15/08/2012 and project as described in the determined PDD.

### 2.2 Follow-up Interviews

On 07/08/2012 Bureau Veritas Certification verification team conducted a visit to the project site (DTEK Mine Komsomolets Donbassa PJSC) and performed (on-site) interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of DTEK Mine Komsomolets



Donbassa PJSC and Eco-Alliance Ltd. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

**Table 1 Interview topics**

Interviewed organization	Interview topics
DTEK Mine Komsomolets Donbassa PJSC	<ul style="list-style-type: none"> <li>➤ Organizational structure</li> <li>➤ Responsibilities and authorities</li> <li>➤ Roles and responsibilities for data collection and processing</li> <li>➤ Installation of equipment</li> <li>➤ Data logging, archiving and reporting</li> <li>➤ Metering equipment control</li> <li>➤ Metering record keeping system, database</li> <li>➤ IT management</li> <li>➤ Training of personnel</li> <li>➤ Quality management procedures and technology</li> <li>➤ Internal audits and check-ups</li> </ul>
CONSULTANT: Eco-Alliance Ltd.	<ul style="list-style-type: none"> <li>➤ Baseline methodology</li> <li>➤ Monitoring plan</li> <li>➤ Revision to the monitoring plan</li> <li>➤ Monitoring report</li> <li>➤ Deviations from PDD.</li> </ul>

### 2.3 Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the verification is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the GHG emission reduction calculation.

If the Verification Team, in assessing the monitoring report and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to the monitoring requirements, it should raise these issues and inform the project participants of these issues in the form of:

- (a) Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;
- (b) Clarification request (CL), requesting the project participants to provide additional information for the Verification Team to assess compliance with the monitoring plan;
- (c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

The Verification Team will make an objective assessment as to whether the actions taken by the project participants, if any, satisfactorily resolve the issues raised, if any, and should conclude its findings of the verification.



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

### 3 VERIFICATION CONCLUSIONS

In the following sections, the conclusions of the verification are stated.

The findings from the desk review of the original monitoring documents and the findings from interviews during the follow up visit are described in the Verification Protocol in Appendix A.

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 6 Corrective Action Requests, 1 Clarification Requests.

The number between brackets at the end of each section corresponds to the DVM paragraph.

#### 3.1 Remaining issues and FARs from previous verifications

02 Forward Action Requests were raised during the previous verification. The verification team during the site visit reviewed the implementation of activities as a response on these Forward Action Requests.

The information on these issues is indicated below:

##### **Forward Action Request 01**

A documented instruction/decreed prescribing the storage of data monitored and required for ERUs calculation for two years after the last transfer of ERUs for the project should be issued and communicated to all responsible persons.

**Project participant response** - an official instruction which prescribes the procedure of data storage will be provided for the next verification.

**During the site visit** the Order # 1191 dated 30/08/2011 on data storage within Kyoto Protocol was provided to the verification team.

This document contains instructions on how to store the data monitored and required for ERUs calculation within two years after the last transfer of ERUs for the project and it appoints responsible personnel for each stage of the procedure.

**Verification team conclusion** - the issue is closed.

**Forward Action Request 02**

The monitoring data from the electronic monitoring system should be archived and stored by the responsible person at the coal mine additionally to the data archiving by the Eco-Alliance.

**Project participant response** - the CD with electronic monitoring data will be provided to the coal mine.

**During the site visit** a number of CDs with electronic monitoring data were provided to the verification team.

These CDs provide information that the company Eco-Alliance received from equipment, according to the monitoring plan, by the Internet. Archived information is cumulative for each monitoring period. A copy of the CD also stored in the archives of Eco-Alliance contracts.

**Verification team conclusion** - the issue is closed.

**3.2 Project approval by Parties involved (90-91)**

The project was approved by the host Party, Ukraine, which is confirmed by the Letter of Approval of Ministry for Environmental Protection of Ukraine No 10822/11/10-07, issued on 03/10/2007. The written project approval by the Netherlands, the other Party involved, has been issued by the DFP of that Party when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest (Approval of voluntary participation in a Joint Implementation Project of the Ministry of Economic Affairs of the Netherlands No 2007JI04, issued on 26/11/2007).

The abovementioned written approval is unconditional.

**3.3 Project implementation (92-93)**

There is difference between the determined PDD and implemented project. The name of the Coal Mine has been changed per 29/04/2011. The old name OPEN JOINT STOCK COMPANY COAL MINE KOMSOMOLETS DONBASSA is no longer valid, the new name is:

Full name: DTEK MINE KOMSOMOLETS DONBASSA, PUBLIC JOINT-STOCK COMPANY;

Short name: DTEK MINE KOMSOMOLETS DONBASSA PJSC.

The identifying number and domicile of the legal entity as well as the place of registration remain unchanged.

The conditions defined by paragraph 33 of the JI guidelines are still met for the project.




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- The physical location of the project has not changed.
- The emission sources have not changed.
- The baseline scenario has not changed.
- The changes are consistent with the JI specific approach and/or the clean development mechanism (CDM) methodology upon which the determination was prepared for the project.

During the 4th monitoring period (01/07/2011 to 30/06/2012) only two upgraded boilers and two flares (No.3 and No.4) at the Air Shaft No.3 were operational. The installation of further units as stated in the PDD ver.04 of 14/04/2008 is delayed due to the lack of funds. The coal production decreased and the financial situation of the coal mine got worse. As only four of nine planned units have been installed, the planned amount of emission reductions could not be achieved.

Because of the incomplete implementation and delays in project implementation the coal mine, upon BVC's request, revised the project implementation schedule and provided the updated timeline for the delayed activities in the Monitoring Report.

The status of project activity implementation compared with the PDD is presented in the Table 1 below:

*Table 1 Status of Implementation*

<b>Unit</b>	<b>Planned installation date, as stated in the PDD</b>	<b>firing capacity</b>	<b>Implementation status</b>
<b>Central Shaft</b>			
new boiler	Oct 2007	10 MW	Delayed, planned for 2012
flare #1	Sep 2007	5 MW	Delayed, planned for 2012
flare #2	Apr 2008	5 MW	Delayed, planned for 2012
<b>Air Shaft #3</b>			
cogeneration unit 1	Sep 2008	approx. 3,6 MW	Delayed, planned for 2012
cogeneration unit 2	Sep 2008	approx. 3,6 MW	Delayed, planned for late 2012
cogeneration unit 3	Sep 2008	approx. 3,6 MW	Delayed, planned for late 2012
Two upgraded boilers	Oct 2007	2 x 10 MW	Installed in October 2009
flare #3	Sep 2007	5 MW	Installed in 2008
flare #4	Apr 2008	5 MW	Installed in 2008



The maximum supply pressure from the existing central gas suction system turned out to be not sufficient for the supply of the flares and the boiler with gas. Both flares have been equipped with compressors for additional pressure generation.

Because of the fact that the maximum supply pressure from the existing central gas suction system turned out to be not sufficient for the supply of the flares and the boilers with gas, flares #3 and #4 have been equipped with compressors for additional pressure generation. Monitoring of additional power consumed by the project and accounting of resulted additional GHG emissions were included into the revised monitoring plan which was positively determined by BVC.

### **3.4 Compliance of the monitoring plan with the monitoring methodology (94-98)**

The monitoring occurred in accordance with the PDD regarding which the determination has been deemed final and revised monitoring plan ver.4 of 15/08/2012 which was positively determined in course of the current verification.

For calculating the emission reductions, key factors, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions such as appropriately calibrated measuring equipment, equipment specifications, official data for Ukrainian power grid published by National Environmental Agency of Ukraine, IPCC guidelines, laboratory analysis, are clearly identified, reliable and transparent.

Emission factors, including default emission factors, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The identified areas of concern as to the compliance of the monitoring plan with the monitoring methodology, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR 07, CAR 08, CAR 09, CAR 10).

### **3.5 Revision of monitoring plan (99-100)**

In the course of first monitoring period (09/08/2008 – 03/11/2009) the original monitoring plan described in the registered PDD version 04 of 14/04/2008 was modified by the project participants. The project participants provided an appropriate justification for the proposed revision which was caused by a set of reasons: delay in project implementation resulted into change of monitoring period and frequency of some parameters calculation; installation of compressors for additional pressure generation and necessity to calculate additional electricity consumed by the project due to the



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absence of power meter during the 1<sup>st</sup> monitoring period; adjustment of some formulae in order to fit the applied measuring/monitoring method better. Changes introduced were sufficiently described in the revised Monitoring Plan ver. 1c of 25/05/2010 which obtained positive determination conclusion in course of the 1<sup>st</sup> verification under the project.

During the 2<sup>nd</sup> monitoring period (04/11/2009-31/10/2010) the revised monitoring plan version 1c was slightly modified in respect of the method for determination of additional electricity amount consumed by the project (which is in fact the electric energy used by the compressors and other equipment installed in the flare units), as during the first part of the previous monitoring period (from 04/11/2009 to 30/04/2010) the consumed power amount was calculated using the operation hours of the flares, and on 30/04/2010 electric power meters were installed enabling the direct measuring of the amount of electricity consumed by the flares. This modification, provided in the revised monitoring plan version 2 of 03/02/2011, was also positively determined by BVC during the 2<sup>nd</sup> periodic verification.

During the 3<sup>rd</sup> monitoring period (01/11/2010–30/06/2011) the revised monitoring plan version 3 was slightly modified based on the previously determined Revised Monitoring Plan version 2 dated 03/02/2011 but with two another modifications concerning the data source and the value of carbon emission factor for the Ukrainian power grid, and the monitoring method for additional electricity consumed by the project. This modification, provided in the revised monitoring plan version 3 of 23/08/2011, was also positively determined by BVC during the 3<sup>rd</sup> periodic verification.

At the current verification the project participants provided for determination another revision of the monitoring plan (Revised Monitoring Plan version 4 of 15/08/2012) based on the previously determined Revised Monitoring Plan version 3 dated 23/08/2011 with modification concerning new source for CO<sub>2</sub> emission factor of fuel used for captive power or heat. The factor is now calculated using the value for “Other Bituminous Coal” of 25.87 t C/TJ from “National Inventory Report of Anthropogenic Emissions from Sources and Absorption by Absorbers of Greenhouse Gases in Ukraine for 1990-2009” Baseline carbon emission factor for other bituminous coal approved in Ukraine. This modification, provided in the revised monitoring plan version 4 of 15/08/2012, was also positively determined by BVC during the 4<sup>th</sup> periodic verification.

A monitoring plan based on the “Approved consolidated baseline methodology ACM0008”, Version 03, Sectoral Scope: 8 and 10, EB28 is applied to the project. The differences as per the ACM0008 are listed below.

The calculation of the emission reductions is not calculated on a yearly basis, but for an individual period. Flow data and flare efficiency as well as the methane amount destroyed by flaring MDFI are calculated in 15 min. intervals in Excel sheets. The main emissions variables for project emissions, baseline emissions and emissions reductions are calculated on a monthly basis. Yearly sums and a total sum for the monitoring are calculated.



The flares have been equipped with compressors for additional pressure generation, so additional power, which is measured by power meters, is consumed by the project. The formula from the ACM0008 for additional project emissions from energy used to capture and use methane has been included in the revised Monitoring Plan. This formula was missing in the original monitoring plan.

The formula for the calculation of project emissions from uncombusted methane has been updated. Formulae from the methodological “Tool to determine project emissions from flaring gases containing methane”, EB 28 Meeting report, Annex 13, has been adopted for the determination of the project emissions from flaring. The calculation of project emissions from uncombusted methane from flaring is now more accurate.

In difference to the flaring tool combustion efficiency of 99.5%, according to the IPCC guidelines (see also ACM0008 Version 1, 2 and 3), has been taken into account for combustion temperatures above 850°C; see justification in Annex 3. The default value of 90% is used in the range from 500°C to 850°C and the default value of 90% below 500°C.

The description and appropriate justification of the proposed revision to the monitoring plan was provided by the project participants in the Revised Monitoring Plan version 4 dated 15/08/2012 and in the current Monitoring Report.

The proposed revision improves the accuracy and applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans.

The Management and Operational Systems are eligible for reliable project monitoring according to the revised plan version 4.

### **3.6 Data management (101)**

The data and their sources, provided in the monitoring report, are clearly identified, reliable and transparent.

The implementation of data collection procedures is in accordance with the PDD and revised monitoring plan, including the quality control and quality assurance procedures.

The monitoring system is supervised by the administration of the coal mine under the existing control and reporting system. The general supervision of the electronically monitoring system is executed by Eco-Alliance LLC, who is consultant for the coal mine.

The function of the monitoring equipment, including its calibration status, is in order.

The evidence and records used for the monitoring are maintained in a traceable manner.



The data are collected, processed and stored using Siemens SIMATIC PLC S7 system and Siemens WINCC programming software. The collected data are stored electronically by a data logger and on paper in journals by the coal mine personnel. One time per hour the data are sent via GPS to an Internet-based data base. Further on the data is sent to the workstation of Eco-Alliance, the project consultant, with frequency 1 time per week, per month and per year and archived quarterly and annually on the CD.

The data can be read any time from the internet data base by authorised personnel. For plausibility checks and potential data back up the data logged in the hand written journals of the suction system can be taken. In case of problems with data transferring to the server the data can be recovered from the internal memory of the unit's computer where it's stored for 7 days. Eco-Alliance regularly verifies the electronically recorded data with the handwritten data and checks the stored data for plausibility, errors, deviations and non-conformity.

The employees responsible for the monitoring control have been trained on-the-job during the installation and operation of the monitoring system.

The troubleshooting procedures are defined and the coal mine personnel are instructed accordingly.

The Coal Mine has Occupational Health and Safety Management System certified against the requirements of OHSAS 18001:2007 international standard.

The function of the monitoring equipment, including its calibration status, is in order. The measurement equipment used for project monitoring is serviced, calibrated and maintained in accordance with the original manufacturer's instructions and industry standards; relevant records are kept as required.

The evidence and records used for the monitoring are maintained in a traceable manner. All necessary information for monitoring of GHGs emission reductions are stored in paper or/and electronic formats.

The data collection and management system for the project is in accordance with the PDD and revised monitoring plan. The general project management is implemented by the Technical Director of the Komsomolets Donbassa coal mine through supervising and coordinating activities of his subordinates, such as the Director of Capital Development, the Deputy Director on surface degasification, heat technician, head of safety engineering department, etc. The project management structure is presented in the MR 04 section C.1.1.

The Monitoring Report provides sufficient information on the assigning roles, responsibilities and authorities for implementation and maintenance of monitoring procedures including control of data. The verification team confirms effectiveness of the existing management and operational systems and found them eligible for reliable project monitoring.



The identified areas of concern as to the data management, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR 11, CL 01).

### **3.7 Verification regarding programmes of activities (102-110)**

Not applicable.

## **4 VERIFICATION OPINION**

Bureau Veritas Certification has performed the 4<sup>th</sup> periodic verification for the period 01/07/2011 to 30/06/2012 of the "CMM utilisation on the Joint Stock Company named Komsomolets Donbassa Coal Mine of DTEK (Donbasskaya Toplivnaya Energeticheskaya Kompaniya)" project in Ukraine, which applies the methodology ACM0008 version 3. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The verification consisted of the following three phases: i) desk review of the monitoring report against the project design and 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 management of DTEK Mine Komsomolets Donbassa, Public Joint Stock Company is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring Plan as per determined changes. The development and maintenance of records and reporting procedures are in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 2 for the reporting period from 01/07/2011 to 30/06/2012 as indicated below. Bureau Veritas Certification confirms that the project is implemented as per determined changes. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

Bureau Veritas Certification can confirm that the GHG emission reduction is accurately calculated and is free of material errors, omissions, or misstatements. Our opinion relates to the project's GHG emissions and resulting GHG emissions reductions reported and related to the approved project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated, we confirm, with a reasonable level of assurance, the following statement:

Reporting period: From 01/07/2011 to 30/06/2012

For the period from 01/07/2011 to 31/12/2011

Baseline emissions	: 71 326	tonnes CO <sub>2</sub> equivalent;
Project emissions	: 10 081	tonnes CO <sub>2</sub> equivalent;
Emission Reductions	: 61 245	tonnes CO <sub>2</sub> equivalent.

For the period from 01/01/2012 to 30/06/2012

Baseline emissions	: 88 191	tonnes CO <sub>2</sub> equivalent;
Project emissions	: 11 871	tonnes CO <sub>2</sub> equivalent;
Emission Reductions	: 76 320	tonnes CO <sub>2</sub> equivalent.

Total for the period from 01/07/2010 to 30/06/2011:

Baseline emissions	: 159 517	tonnes CO <sub>2</sub> equivalent;
Project emissions	: 21 952	tonnes CO <sub>2</sub> equivalent;
Emission Reductions	: 137 565	tonnes CO <sub>2</sub> equivalent.



## 5 REFERENCES

### Category 1 Documents:

Documents provided by project participants that relate directly to the GHG components of the project.

- /1/ Project Design Document of the project “CMM utilisation on the Joint Stock Company named Komsomolets Donbassa Coal Mine of DTEK (Donbasskaya Toplivnaya Energeticheskaya Kompanya)”, version 04 dated 14/04/2008
- /2/ Monitoring Report 04 for the period from 01/07/2011 to 30/06/2012 version 1 dated 24/07/2011
- /3/ Monitoring Report 04 for the period from 01/07/2011 to 30/06/2012 version 2 dated 05/08/2011
- /4/ Revised Monitoring Plan version 1c of 25/05/2010
- /5/ Revised Monitoring Plan version 2 of 03/02/2011
- /6/ Revised Monitoring Plan version 3 of 23/08/2011
- /7/ Revised Monitoring Plan version 4 of 15/08/2012
- /8/ Verification Report “CMM utilisation on the Joint Stock Company named Komsomolets Donbassa Coal Mine of DTEK (Donbasskaya Toplivnaya Energeticheskaya Kompanya)” No. UKRAINE-ver/0312/2011 dated 01/09/2011 rev.02, including the Determination of the revised Monitoring Plan ver.3 of 23/08/2011
- /9/ Calculation of Emission Reductions – excel file “ER-KD-2011-07-01 to 2012-06-30.V1.xls”, ver.1
- /10/ Calculation of Emission Reductions – excel file “ER-KD-2011-07-01 to 2012-06-30.V2.xls”, ver.2
- /11/ Flare data measurement for flare 3 - excel file “KD-F3\_Measuring\_Data\_2011-07-01 to 2012-06-30.V1.xls”
- /12/ Flare data measurement for flare 4 - excel file “KD-F4\_Measuring\_Data\_2011-07-01 to 2012-06-30.V1.xls”
- /13/ Upgraded boiler 1 and boiler 2 data measurement – excel file “KD-B1+2\_Measuring\_Data\_2011-07-01 to 2012-06-30.V2.xls”
- /14/ Letter of Approval of Ministry of Environmental Protection of Ukraine No 10822/11/10-07, issued 03/10/2007
- /15/ Approval of voluntary participation in a Joint Implementation Project of the Ministry of Economic Affairs of the Netherlands No 2007JI04, issued 26/11/2007

### Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /1/ Photo–Control panel of UKG-5/8, serial # 03-08
- /2/ Photo– UKG-5/8, serial # 03-08
- /3/ Photo–Control panel of UKG-5/8, serial # 04-08
- /4/ Photo–UKG-5/8, serial # 0408
- /5/ Photo–pressure difference transmitter type 7MF4433-1CA02-1AB1-Z, serial



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- # N1-W401-9002992
- /6/ Photo–pressure difference transmitter type 7MF4433-1CA02-1AB1-Z, serial # N1-W401-9002993
  - /7/ Logbook on UKG # 4 operation for the period since 06/07/2011 till 04/07/2012, Komsomolets Donbassa Coal Mine
  - /8/ Logbook on UKG # 3 operation for the period since 01/07/2011 till 01/07/2012, Komsomolets Donbassa Coal Mine
  - /9/ Logbook on UKG 5/8 operation hours and energy consumption for the period since 07/07/2011 till 08/07/2012
  - /10/ Sample analysis results on methane discharge captured by vacuum-pump station
  - /11/ Report # 1792034170 on scientific and technical work approved 05/02/2012 by the “State Makeyevka Institute for Research and Education for Safe Work in the Coal Mining Industry”
  - /12/ Agreement # 1792034286/46/2 dated 20/02/2012 on providing scientific and technical works between the “State Makeyevka Institute for Research and Education for Safe Work in the Coal Mining Industry” and Komsomolets Donbassa Coal Mine PJSC
  - /13/ Agreement # 1792034170/408/1 dated 20/12/2010 on providing scientific and technical works between the “State Makeyevka Institute for Research and Education for Safe Work in the Coal Mining Industry” and Komsomolets Donbassa Coal Mine PJSC
  - /14/ Statement dated 05/03/2012 on executed maintenance services of gas utilization equipment at Komsomolets Donbassa Coal Mine PJSC (UKG-5/8, fabrication # 3)
  - /15/ Statement dated 05/03/2012 on executed maintenance services of gas utilization equipment at Komsomolets Donbassa Coal Mine PJSC (UKG-5/8, fabrication # 4)
  - /16/ Statement dated 14/02/2012 on executed maintenance services of gas utilization equipment at Komsomolets Donbassa Coal Mine PJSC (UKG-5/8, fabrication # 3)
  - /17/ Statement dated 14/02/2012 on executed maintenance services of gas utilization equipment at Komsomolets Donbassa Coal Mine PJSC (UKG-5/8, fabrication # 4)
  - /18/ Statement dated 26/01/2012 on executed maintenance services of gas utilization equipment at Komsomolets Donbassa Coal Mine PJSC (UKG-5/8, fabrication # 4)
  - /19/ Statement dated 26/01/2012 on executed maintenance services of gas utilization equipment at Komsomolets Donbassa Coal Mine PJSC (UKG-5/8, fabrication # 3)
  - /20/ Statement dated 03/10/2011 on temperature sensors replacement (unit 03-08 – sensor, serial # 69884 by sensor, serial # 78648; unit 04-08 – sensor, serial # 71068 by sensor, serial # 76984)
  - /21/ Form # 2-ТП (air) (annual). Report on environmental protection for 2011
  - /22/ Form # 2-ТП (air) (per quarter). Report on environmental protection for the first quarter of 2012
  - /23/ Form # 2-ТП (air) (per quarter). Report on environmental protection for the

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- second quarter of 2012
- /24/ Monitoring plan on gas mixture consumption and utilized methane volume by Komsomolets Donbassa Coal Mine (first stage)
  - /25/ Order # 1191 dated 30/08/2011 on data storage within Kyoto Protocol
  - /26/ Parts substitution journal, Komsomolets Donbassa Coal Mine
  - /27/ Photo–Boiler # 1, registration # 46463
  - /28/ Photo–Resistance thermometer type TSPU 1-3N Pt-100 0,5%, serial # 09440
  - /29/ Photo–Pressure difference transmitter type PR-28, serial # 11092049
  - /30/ Photo–Resistance thermometer type TSPU 1-3N Pt-100 0,5%, serial # 08247
  - /31/ Photo–Pressure difference transmitter type PR-28, serial # 02100076
  - /32/ Photo–Boiler # 2, registration # 46464
  - /33/ Photo–ERU measurement automatic system
  - /34/ Logbook on ERU measurement automatic system operation for the period for 23/05/2011 to 14/05/2012, Komsomolets Donbassa Coal Mine
  - /35/ Photo– Infrared measurement type ULTRAMAT 23
  - /36/ Photo–Resistance thermometer type TSPU 1-3N Pt-100 0,5%, serial # 09462
  - /37/ Protocol # 175 dated 20/10/2011 on commission session on health and safety knowledge testing
  - /38/ Report on inspection and adjustment of boilers KE-10-14C # 1, 2, DTEK Komsomolets Donbassa Coal Mine PJSC
  - /39/ Passport on gas burner (ГГБ-МГП-750, # 2), fabricated 06/2008
  - /40/ Passport on gas burner (ГГБ-МГП-750, # 3), fabricated 06/2008
  - /41/ Passport on gas burner (ГГБ-МГП-750, # 4), fabricated 06/2008
  - /42/ Passport on gas burner (ГГБ-МГП-750, # 5), fabricated 06/2008
  - /43/ Passport on boiler type KE-10-14C, registration # 46463 (fabrication # 62350)
  - /44/ Passport on boiler type KE-10-14C, registration # 46463 (fabrication # 62360)
  - /45/ Calibration certificate # 2014 dated 18/10/2011, valid till 18/10/2012, on pressure difference transmitter type PR-28, fabrication # 110902049, issued by Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
  - /46/ Calibration certificate # 2013 dated 18/10/2011, valid till 18/10/2012, on pressure difference transmitter type PR-28, fabrication # 02100076, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
  - /47/ Calibration certificate # 2015 dated 18/10/2011 on pressure transmitter type Siemens Sitrans P, fabrication # AZB/X1110846, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
  - /48/ Calibration certificate # 2008 dated 18/10/2011, valid till 18/10/2012, on pressure transmitter type Siemens Sitrans P, fabrication # AZB/W5132860, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
  - /49/ Passport on resistance transmitter type TSPU 1-3, fabrication # 09440 (last calibration date–18/10/2011)
  - /50/ Calibration certificate # 2007 dated 18/10/2011, valid till 18/10/2012, on pressure transmitter type Siemens Sitrans P, fabrication # AZB/X1110849, issued by the Sumy Regional Scientific and Production Centre for



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- /51/ Passport on resistance transmitter type TSPU 1-3, fabrication # 08247 (last calibration date–18/10/2011)
- /52/ Calibration certificate # 2011 dated 18/10/2011, valid till 18/10/2012, on pressure transmitter type PR-28, fabrication # 06091154, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /53/ Calibration certificate # 2010 dated 18/10/2011, valid till 18/10/2012, on pressure transmitter type PC-28, fabrication # 03081167, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /54/ Calibration certificate # 2012 dated 18/10/2011, valid till 18/10/2012, on pressure transmitter type PR-28, fabrication # 06091155, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /55/ Calibration certificate # 2017 dated 18/10/2011, valid till 18/10/2012, on resistance transmitter type TSPU 1-3, fabrication # 09446, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /56/ Calibration certificate # 2009 dated 18/10/2011, valid till 18/10/2012, on pressure transmitter type PC-28, fabrication # 03081169, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /57/ Passport on resistance transmitter type TSPU 1-3, fabrication # 09447 (last calibration date–18/10/2011)
- /58/ Passport on resistance transmitter type TSPU 1-3, fabrication # 09449 (last calibration date–18/10/2011)
- /59/ Passport on resistance transmitter type TSPU 1-3, fabrication # 09460 (last calibration date–18/10/2011)
- /60/ Passport on resistance transmitter type TSPU 1-3, fabrication # 09450 (last calibration date–18/10/2011)
- /61/ Calibration certificate # 2016 dated 18/10/2011 on pressure transmitter type Siemens Sitrans P, fabrication # AZB/W5132863, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /62/ Passport on resistance transmitter type TSPU 1-3, fabrication # 09461 (last calibration date–18/10/2011)
- /63/ Passport on infrared measurement type Ultramat 23, fabrication # N1 W4-340 (last calibration date–18/10/2011)
- /64/ Passport on gas flow meter, fabrication # 77777 (last calibration date–20/10/2011)
- /65/ Passport on gas flow meter, fabrication # 77778 (last calibration date–20/10/2011)
- /66/ Passport on gas flow meter, fabrication # 919191 (last calibration date–20/10/2011)
- /67/ Passport on gas flow meter, fabrication # 919192 (last calibration date–20/10/2011)



- /68/ Passport on gas flow meter, fabrication # 3 (last calibration date–20/10/2011)
- /69/ Passport on gas flow meter, fabrication # K2989 (last calibration date–20/10/2011)
- /70/ Statement dated 20/11/2010 on flow meters # 332, 333, 331 by flow meters # 77777, 77778, 919192
- /71/ Passport on infrared measurement type Ultramat 23, fabrication # N1 W4-339 (last calibration date–18/10/2011)
- /72/ Calibration certificate # 2175 dated 11/10/2011, valid till 11/10/2012, on pressure transmitter type Siemens Sitrans P, fabrication # N1-W401-9002993, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /73/ Calibration certificate # 2174 dated 11/10/2011, valid till 11/10/2012, on pressure transmitter type Siemens Sitrans P, fabrication # N1-W401-9002992, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /74/ Calibration certificate # 2177 dated 11/10/2011, valid till 11/10/2012, on pressure transmitter type Siemens Sitrans P, fabrication # AZB/7153229, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /75/ Calibration certificate # 2176 dated 11/10/2011, valid till 11/10/2012, on pressure transmitter type Siemens Sitrans P, fabrication # AZB/1196798, issued by the Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification
- /76/ Passport on resistance transmitter type TSPU 1-3, fabrication # 08259 (last calibration date–11/10/2011)
- /77/ Passport on resistance transmitter type TSPU 1-3, fabrication # 08269 (last calibration date–11/10/2011)
- /78/ Passport on gas flow meter, fabrication # K2989A (last calibration date–19/12/2011)
- /79/ Passport on gas flow meter, fabrication # K2989B (last calibration date–19/12/2011)
- /80/ Announcement on ecological impact of Complex Consumption of Captured Methane at Komsomolets Donbassa Coal Mine ВПС-3 Production Site project implementation.
- /81/ Complex Consumption of Captured Methane at Komsomolets Donbassa Coal Mine ВПС-3 Production Site. Project design.

**Persons interviewed:**

List of persons interviewed during the verification or persons that contributed with other information that are not included in the documents listed above.

- /1/ Roman Vodopshyn – Acting general director of DTEK Mine Komsomolets Donbassa PJSC
- /2/ Volodymyr Rohovets – Head of mining operations on capital construction of DTEK Mine Komsomolets Donbassa PJSC
- /3/ Andrii Kaminskii – Chief power engineer of DTEK Mine Komsomolets Donbassa PJSC
- /4/ Leonid Chernomorskii – Head of division for preventive works and safety



- measures of DTEK Mine Komsomolets Donbassa PJSC
- /5/ Yevgen Denisenko – Senior mechanical operator of the boiler house at the air shaft No.3 of DTEK Mine Komsomolets Donbassa PJSC
  - /6/ Nataliia Ponurovska – Lead engineer on environmental protection of DTEK Mine Komsomolets Donbassa PJSC
  - /7/ Shelegeda P. – Deputy Director of “Eco-Alliance” LLC
  - /8/ Avtonomov V. – JI project manager of “Eco-Alliance” LLC



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## APPENDIX A: VERIFICATION PROTOCOL

**Table 1. Check list for verification, according to the JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)**

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
<b>Project approvals by Parties involved</b>				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	The project has been approved by both Host Party (Ukraine) and the other Party involved (the Netherlands). The written project approvals were issued by NFPs of Parties involved (see chapter 7 References in the verification report). Both Letters of Approval were available at the beginning of 1 <sup>st</sup> verification of the project.	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	Yes, all the written project approvals by Parties involved are unconditional.	OK	OK
<b>Project implementation</b>				
92	Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	During the 4 <sup>th</sup> monitoring period (01/07/2011 to 30/06/2012) only two upgraded boilers and two flares (No.3 and No.4) at the Air Shaft No.3 were operational. Because of the incomplete implementation and delays in project implementation the CAR has been raised:  <u>Corrective action request 01</u> Please provide in the MR the actual reasons and reasonable justification of the delay in the further units installation.	CAR 01 CAR 02	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<u>Corrective action request 02</u> Please provide the description of the change to the monitoring plan as described in the PDD.		
93	What is the status of operation of the project during the monitoring period?	<p>The project started its operation on 9th August 2008 with flare 3 commissioning.</p> <p>During the 4<sup>th</sup> monitoring period only two upgraded boilers (installed in October 2009) and two flares No.3 and No.4 (installed in 2008) at the Air Shaft No.3 were operational.</p> <p>The status of project activity implementation compared to the PDD is presented in the section A.6 of the MR.</p> <p><u>Corrective action request 03</u>            Please provide comparison of the planned in the PDD and actually achieved values of emission reductions, and explain the deviation.</p>	CAR 03	OK
<b>Compliance with monitoring plan</b>				
94	Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	The monitoring occurred in accordance with the PDD regarding which the determination has been deemed final and revised monitoring plan ver.4 which was submitted for the determination in course of the current verification.	OK	OK
95 (a)	For calculating the emission reductions or enhancements of net removals, were key	Key factors, such as availability and amount of extracted coal mine gas, concentration of methane in	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	factors, e.g. those listed in 23 (b) (i)-(vii) above, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate?	the extracted gas, heat demand at the coal mine etc, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account for calculating the emission reductions.		
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	All the data sources used for calculating emission reductions are clearly identified, reliable and transparent. They are listed in the revised monitoring plan and MR sections B.1.2, B.2.1, B.2.2.  <u>Corrective action request 04</u> Please provide information about new source for CO <sub>2</sub> emission factor of fuel used for captive power or heat.	CAR 04	OK
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	Emission factors, including default emission factors such as carbon emission factor for Ukrainian power grid, carbon emission factor for combusted methane, GWP and CO <sub>2</sub> emission factor of fuel used for captive power or heat, which are used for calculating the emission reductions, are selected by carefully balancing accuracy and reasonableness, and are appropriately justified of the choice.	OK	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent	The performed calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner. The continuation of situation existing before project	CAR 05	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	manner?	<p>implementation, namely venting of the CMM into the atmosphere, heat generation with the existing coal fired boilers, and the full purchase of electricity from the grid, was proven in the determined PDD to be the most plausible scenario.</p> <p><u>Corrective action request 05</u> Please recalculate the project and baseline emissions and emission reductions by sources.</p>		
<b>Applicable to JI SSC projects only</b>				
96	<p>Is the relevant threshold to be classified as JI SSC project not exceeded during the monitoring period on an annual average basis?</p> <p>If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?</p>	N/a	N/a	N/a
<b>Applicable to bundled JI SSC projects only</b>				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	N/a	N/a	N/a
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	N/a	N/a	N/a
98	If the monitoring is based on a monitoring plan that provides for overlapping	N/a	N/a	N/a



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring report? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?			
<b>Revision of monitoring plan</b>				
<b>Applicable only if monitoring plan is revised by project participant</b>				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	At the current verification the project participants provided for determination another revision of the monitoring plan (Revised Monitoring Plan version 4 dated 15/08/2012) based on the previously determined Revised Monitoring Plan version 3 dated 23/08/2011 with modification concerning new source for CO <sub>2</sub> emission factor of fuel used for captive power or heat. The factor is now calculated using the value for "Other Bituminous Coal" of 25.87 t C/TJ from "National Inventory Report of Anthropogenic Emissions from Sources and Absorption by Absorbers of Greenhouse Gases in Ukraine for 1990-2009" Baseline carbon emission factor for other bituminous coal approved in Ukraine. This modification, provided in the revised monitoring plan version 4 of 15/08/2012, was also positively determined by BVC during the 4 <sup>th</sup> periodic verification.	OK	OK
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing	The proposed changes presented in the revised monitoring plan ver. 4 of 15/08/2012 improve accuracy and applicability of the collected information compared to the original monitoring plan. The conformity with the	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	conformity with the relevant rules and regulations for the establishment of monitoring plans?	relevant rules and regulations for the establishment of the monitoring plans remains unchanged.		
<b>Data management</b>				
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	The implementation of data collection procedures is in accordance with the PDD and revised monitoring plan, including the quality control and quality assurance procedures.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	The measurement equipment used for project monitoring is serviced, calibrated and maintained in accordance with the original manufacturer's instructions and industry standards.	OK	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidence and records used for the monitoring are maintained in a traceable manner. All necessary information for monitoring of GHGs emission reductions are stored in paper or/and electronic formats.  <u>Corrective action request 06</u> Please correct the information about the journal where emission reduction calculation results are notified and specify who performs such overview calculations.	CAR 06	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	The data collection and management system for the project is in accordance with the PDD and revised monitoring plan. The verification team confirms effectiveness of the existing management and	CL 01	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		operational systems and found them eligible for reliable project monitoring.  <i>Clarification request 01</i> Please clarify if any personnel training was carried out during the considered monitoring period.		
<b>Verification regarding programs of activities (additional elements for assessment)</b>				
102	Is any JPA that has not been added to the JI PoA not verified?	N/a	N/a	N/a
103	Is the verification based on the monitoring reports of all JPAs to be verified?	N/a	N/a	N/a
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	N/a	N/a	N/a
104	Does the monitoring period not overlap with previous monitoring periods?	N/a	N/a	N/a
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	N/a	N/a	N/a
<b>Applicable to sample-based approach only</b>				
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into account that: (i) For each verification that uses a sample-based approach, the sample selection shall be sufficiently	N/a	N/a	N/a



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<p>representative of the JPAs in the JI PoA such extrapolation to all JPAs identified for that verification is reasonable, taking into account differences among the characteristics of JPAs, such as:</p> <ul style="list-style-type: none"> <li>- The types of JPAs;</li> <li>- The complexity of the applicable technologies and/or measures used;</li> <li>- The geographical location of each JPA;</li> <li>- The amounts of expected emission reductions of the JPAs being verified;</li> <li>- The number of JPAs for which emission reductions are being verified;</li> <li>- The length of monitoring periods of the JPAs being verified; and</li> <li>- The samples selected for prior verifications, if any?</li> </ul>			
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	N/a	N/a	N/a
108	Has the AIE made site inspections of at least the square root of the number of total JPAs, rounded to the upper whole number? If the AIE makes no site inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole	N/a	N/a	N/a



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	number, then does the AIE provide a reasonable explanation and justification?			
109	Is the sampling plan available for submission to the secretariat for the JISC.s ex ante assessment? (Optional)	N/a	N/a	N/a
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?	N/a	N/a	N/a

**Table 2 Resolution of Corrective Action and Clarification Requests**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
<u>Corrective action request 01</u> Please provide in the MR the actual reasons and reasonable justification of the delay in the further units installation.	92	The information on the delay in the further units installation has been provided in the MR.	The issue is closed.
<u>Corrective action request 02</u> Please provide the description of the change to the monitoring plan as described in the PDD.	92	The description of the change to the monitoring plan as described in the PDD has been provided in the Revised MR ver.04 dated 15/08/2012. The supporting documentation has been provided to the verification team.	The issue is closed.



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<p><u>Corrective action request 03</u> Please provide comparison of the planned in the PDD and actually achieved values of emission reductions, and explain the deviation.</p>	93	The MR has been corrected. See MR ver. 2 dated 15/08/2012	The issue is closed.
<p><u>Corrective action request 04</u> Please provide information about new source for CO<sub>2</sub> emission factor of fuel used for captive power or heat.</p>	95 (b)	The MR has been corrected. See MR ver. 2 dated 15/08/2012	The issue is closed.
<p><u>Corrective action request 05</u> Please recalculate the project and baseline emissions and emission reductions by sources.</p>	95 (d)	The MR has been corrected. See MR ver. 2 dated 15/08/2012 and Calculation of Emission Reductions – excel file “ER-KD-2011-07-01 to 2012-06-30.V2.xls”, ver.2	The issue is closed.
<p><u>Corrective action request 06</u> Please, correct the information about the journal where emission reduction calculation results are notified and specify who performs such overview calculations.</p>	101 (c)	The MR has been corrected. See MR ver. 2 dated 15/08/2012	The issue is closed.
<p><u>Clarification request 01</u> Please clarify if any personnel training was carried out during the considered monitoring period.</p>	101 (d)	No new personnel training has been carried out because no new equipment has been installed and no new personnel has been recruited. Employee training carried out regularly in accordance with the approved plans. See MR ver. 2 dated 15/08/2012	The issue is closed.