

# VERIFICATION REPORT LLC "ECO-ALLIANCE"

# **VERIFICATION OF THE**

CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass"

Fourth periodic (period 01/05/2012 – 31/12/2012)

REPORT NO. UKRAINE-VER/0884/2012
REVISION NO. 01

**BUREAU VERITAS CERTIFICATION** 

Report No:	UKRAINE-ver/	0884/	2012
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#### **VERIFICATION REPORT**

Date of first issue: 17/04/2013	Organizational unit: Bureau Veritas Certification Holding SAS
Client:	Client ref.:
LLC "ECO-ALLIANCE"	Mr. Kasyanov

Summary

Report No.:

Bureau Veritas Certification has made the fourth verification of the JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass", JI Registration Reference Number 0078, project of LLC "ECO-ALLIANCE" located in 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 monitoring report against 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 Requests, Corrective Actions Requests, Forward Actions 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 183, 838 tonnes of  $CO_2$  equivalent for the monitoring period from 01/05/2012 to 31/12/2012.

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

Subject Group:

UKRAINE-ver/0884/2012	JI		
Project title: "CMM utilisation on the 0" "Kommunarskaya" of the State Company "GOAO Shakhtoupravl			
Work carried out by:		1	
Olena Manziuk – Team Leader, Lead Verifier Svitlana Gariyenchyk – Team Member, Lead Verifier Dmytro Balyn – Technical Specialist			
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Ivan Sokolov – Internal Technical Reviewer Vasyl Kobzar – Technical Specialist			No distribution without permission from the Client or responsible organizational unit
Work approved by:		İ	
Ivan Sokolov – Operational Manager			Limited distribution
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#### **VERIFICATION REPORT**

#### **Abbreviations**

AIE Accredited Independent Entity

BVC Bureau Veritas Certification Holding SAS

CAR Corrective Action Request

CDM Clean Development Mechanism

CH<sub>4</sub> Methane

CL Clarification Request
CMM Coal Mine Methane
CO<sub>2</sub> Carbon Dioxide

DVM Determination and Verification Manual

ERU Emission Reduction Unit FAR Forward Action Request GHG Green House Gas(es) GWP Global Warming Potential

IPCC Intergovernmental Panel on Climate Change

JI Joint Implementation

JISC Joint Implementation Supervisory Committee

MP Monitoring Plan
MR Monitoring Report

DFP Designated Focal Point

NMHC Non methane hydrocarbons

PDD Project Design Document

UNFCCC United Nations Framework Convention for Climate Change



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#### 1 INTRODUCTION

LLC "ECO-ALLIANCE" has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass" (hereafter called "the project") in 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.

# 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

Verification scope is defined as an independent and objective review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions. The verification is based on the submitted monitoring report, the determined project design document including the project's baseline study, revised 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.

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#### 1.3 Verification Team

The verification team consists of the following personnel:

Olena Manziuk

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Svitlana Gariyenchyk

Bureau Veritas Certification Team Member, Climate Change Lead Verifier

Dmytro Balyn

Bureau Veritas Certification Technical Specialist

This verification report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification Internal Technical Reviewer

Vasyl Kobzar

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 Manual, Determination and Verification issued bν 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.



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#### 2.1 Review of Documents

The Monitoring Report (MR) submitted by LLC "ECO-ALLIANCE" 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 (MR) version 1 dated 14/12/2012, MR version 2 dated 21/01/2013, MR version 3 dated 12/03/2013, MR version 4 dated 08/04/2013, and project as described in the determined PDD.

## 2.2 Follow-up Interviews

On 26/12/2012 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Coal Mine № 22 "Kommunarskaya", LLC "Eco-Alliance" and Carbon-TF B.V. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed	Interview topics
organization	into the integral
Coal Mine № 22	Organizational structure
"Kommunarskaya"	Responsibilities and authorities
	Roles and responsibilities for data collection and processing
	Installation of equipment
	Data logging, archiving, and reporting
	Metering equipment control
	Metering record keeping system, database
	IT management
	Training of personnel
	Quality management procedures and technology
	Internal audits and check-ups
Consultant:	Baseline methodology
Carbon-TF B.V.,	Revised monitoring plan
Eco-Alliance LLC.	Monitoring report



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# 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.



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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 fifteen Corrective Action Requests and four 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

No FAR was raised in the frame of previous verification (i.e. the reporting period from 16/03/2011 to 30/04/2012).

# 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 #3873/11/10-08, issued on 26/03/2008. 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, Ref. 2008JI05, dated 22/04/2008).

The abovementioned written approvals are unconditional.

# 3.3 Project implementation (92-93)

In this project Coal Mine Methane (CMM), which has been sucked out of the active Coal Mine Nr. 22 Kommunarskaya, has been utilised in flares, a cogeneration unit, boilers and a ventilation air heater. The methane has been burned to less harmful  $CO_2$ . The cogeneration unit has generated power which has displaced conventionally produced power and gained an additional amount of  $CO_2$  reductions.

In summer 2010 a second flare has been installed and started production at 10/08/2010. A third flare has been installed at the air shaft of the coal mine and started production at 29/10/2010.



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During the monitoring period (i.e. 01/05/2012 - 31/12/2012) the ventilation air heater was working only for short period of time; namely, from October 2012 to December 2012.

Also, within the monitoring period the flare 2 has been shut down and has been moved off the site. That activity was in June 2012. Verification team checked the situation during the site visit, and project participants justified it with documented evidences (refer to the section 5 of verification report).

Furthermore, a second cogeneration unit has been installed in June 2012 and started production on 08/06/2012. Statement of commissioning confirms the project activity implementation (refer to documents Category 2 of the section 5 of this verification report).

Table 3.3.1 Amount of methane utilised for heat and power generation and flaring

Unit	period	CH4 [t/period]	Heat generated [MWh]	Power generated [MWh]
Flares	01/05/2012- 31/12/2012	6,909	N/A	N/A
Boilers	01/05/2012- 31/12/2012	739	5,327	N/A
Ventilation air heater	01/05/2012- 31/12/2012	135	1,845	N/A
Cogeneration units	01/05/2012- 31/12/2012	1,824	N/A	9,757
Total	01/05/2012- 31/12/2012	9,606	7,173	9,757

The value of emission reduction achieved for the monitoring period 01/05/2012 - 31/12/2012 is equal 183, 838 tonnes  $CO_2$  equivalent. The value are higher than it was assessed in the PDD for the same period because of the steady operation of installed additional flare and increasing of methane amount at the air shaft of the coal mine.

The identified areas of concern as to project implementation, project participants response and BV Certification's conclusion are described in



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Appendix A (refer to CAR01, CAR02, CAR03, CAR04, CAR05, and CAR06).

# 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 version 6a dated 12/03/2013 which was positively determined in course of the current verification.

For calculating the emission reductions, key factors, such as availability and amount of extracted gas, concentration of methane in the extracted gas and others, 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.

Data sources used for calculating emission reductions such as appropriately calibrated measuring devices, equipment passports, the study of standardized emission factors for the Ukrainian electricity grid, sectoral standards, 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 compliance of the monitoring plan with the monitoring methodology, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR07, CAR08, CL01, CL02, CAR09, CAR10, CAR11, and CL03).

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

In the course of the monitoring period (01/05/2012 - 31/12/2012) the monitoring plan was modified by the project participants. The project participants provided an appropriate justification for the proposed revision caused by a set of reasons that described below. The change is as follows:



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 Change of the value of the CO2 emission factor of fuel used for captive power or heat

The value of the CO2 emission factor of fuel used for captive power or heat was changed. The reason for changing is update of the data source. Now for calculation of the factor the value of 25.99 t C/TJ for "Bituminous Coal" is used. It is the latest assessed value. Due to the regarded revision, it leads to improvement of data applicability because of usage of the latest estimated value of the  $CO_2$  emission factor of fuel used for captive power or heat, and accuracy calculations for the reporting period.

All revisions to the monitoring plan were made in accordance with the paragraph D of the "Guidance on criteria for baseline setting and monitoring" to improve accuracy of the monitoring of emission reductions and applicability of information collected.

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.

Based on above mentioned, Bureau Veritas Certification verification team can conclude that the proposed revision of the monitoring plan of the project is complete, effective and reliable. All relevant emission sources are covered by the monitoring plan and the boundaries of the project are defined correctly and transparently. All parameters were monitored and determined as prescribed. The collected data are stored in electronic and paper formats. The monitoring methodologies and supporting records were sufficient to enable verification of emission reductions. As a result the verification process, no significant lacks of evidence were detected.

Hence, JI project implementation is in compliance of the monitoring plan version 6a dated 12/03/2013 that was positively determined in the frame of the current periodic verification.

The identified areas of concern as to revision of the monitoring plan, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR15).

# 3.6. Data management (101)

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

Two different but similar systems are used for electronically data collection. Data from the boilers and the Ventilation Air Heater (VAH) are



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collected, processed and stored using a Siemens SIMATIC PLC S7 system and Siemens WINCC programming software. All data is stored in the internal memory about 2 GB. One time per hour the data are sent via GPS to an Internet-based Server data base. LLC "Eco-Alliance" ensures regular back up's and archiving. The data can be read any time from the internet data base by authorised personnel. The utilised methane amount is automatically calculated and stored in the PLC. As all input data are stored, the automatically calculation can be checked in retrospect any time.

Data from the flare and the cogeneration unit are collected, processed Siemens SIMATIC using а PLC S7 Siemens WINCC programming software. All data is stored in the internal memory about 2 GB. The data are read daily by Kuhse GmbH via GPS and stored in the Kuhse database in Germany. The data can be viewed any time using special access software provided by Kuhse. Kuhse ensures regular back up and archiving. The data are regularly reviewed by Carbon-TF B.V. and LLC "Eco-Alliance". Carbon-TF B.V. regularly storing and archiving of the data as well as regularly transfer to Excel spreadsheets for analysis, evaluation and reporting procedures.

The data can be read any time from the Kuhse data base by authorised personnel. The utilised methane amount is automatically calculated and stored in the PLC. As all input data are stored, the automatically calculation can be checked in retrospect any time.

For plausibility checks and potential data back up, data recorded by coal mine personnel in hand written logbooks / journals can be taken. The journals are stored by the coal mine.

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

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

Monitoring equipment met the regulatory requirements of Ukraine regarding accuracy and measurement error. All the equipment used for monitoring purposes is in line with national legislative requirements and standards. The accuracy of devices was guaranteed by the manufacturers; the error was calculated and confirmed by device certificates. All monitoring equipment was covered by the detailed calibration plan. The calibration process was under strict control of the PPs. JI project measuring equipment was included in the verification schedule and calibrated with established periodicity. According to the



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documented evidences, all devices are in satisfactory condition. The documented instructions to operate the facilities were also provided to verification team. Thus, the function of the monitoring equipment, including its calibration status, is in order.

The data collection and management system for the JI project is in accordance with the revised monitoring plan version 6a dated 12/03/2013.

The identified areas of concern as to data management, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR012, CAR13, CAR14, and CL04).

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

Not applicable.

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#### 4. VERIFICATION OPINION

Bureau Veritas Certification has performed the fourth periodic verification of the JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass" in Ukraine, which applies the methodology ACM0008 version 03. 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 LLC "ECO-ALLIANCE" 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 Monitoring Plan as per determined changes. The development and maintenance of records and reporting procedures 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 4 dated 08/04/2013 for the reporting period 01/05/2012 – 31/12/2012. 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 01/05/2012 to 31/12/2012

Baseline emissions : 214, 699 tonnes of CO<sub>2</sub> equivalent Project emissions : 30, 861 tonnes of CO<sub>2</sub> equivalent Emission Reductions : 183, 838 tonnes of CO<sub>2</sub> equivalent



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Concluding, for the reporting monitoring period (01/05/2012 - 31/12/2012) total amount of emission reductions is 183, 838 tonnes of  $CO_2$  equivalent.

Project and baseline emissions which are stated above are rounded by monitoring report developers to the whole figure and are based on calculations which are demonstrated in excel calculation spreadsheet attached to the monitoring report.

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#### 5. REFERENCES

#### Category 1 Documents:

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

- /1/ Project Design Document "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass", version 06 dated 06/07/2009
- /2/ Monitoring Report of the JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass" for the monitoring period 01/05/2012 31/12/2012, version 1 dated 14/12/2012
- /3/ Monitoring Report of the JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass" for the monitoring period 01/05/2012 31/12/2012, version 2 dated 21/01/2013
- /4/ Monitoring Report of the JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass" for the monitoring period 01/05/2012 – 31/12/2012, version 3 dated12/03/2013
- /5/ Monitoring Report of the JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass" for the monitoring period 01/05/2012 31/12/2012, version 4 dated 08/04/2013
- /6/ Revised Monitoring Plan version 6a dated 12/03/2013
- /7/ Excel calculation spreadsheet of the JI project "CMM utilisation on the Coal Mine № 22 "Kommunarskaya" of the State Holding Joint-Stock Company "GOAO Shakhtoupravlenye Donbass"
- /8/ Letter of Approval of Ministry for Environmental Protection of Ukraine # 3873/11/10-08, issued on 26/03/2008
- /9/ Approval of voluntary participation in a Joint Implementation Project of the Ministry of Economic Affairs of the Netherlands, Ref. 2008JI05, dated 22/04/2008
- /10/ Initial monitoring data "K22-B1\_Measuring Data\_2012-05-01 to 2012-12-31 V2"
- /11/ Initial monitoring data "K22-F1\_Measuring\_Data\_2012-05-01 to 2012-12-31\_V2"
- /12/ Initial monitoring data "K22-F2\_Measuring\_Data\_2012-05-01 to 2012-06-15 V2"
- /13/ Initial monitoring data "K22-F3\_Measuring\_Data\_EA\_2012-05-01 to 2012-12-31 V2"
- /14/ Initial monitoring data "K22-M1\_Measuring\_Data\_2012-05-01 to 2012-12-31 V2"
- /15/ Initial monitoring data "K22-M2\_Measuring\_Data\_2012-05-01 to 2012-12-31\_V2"



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/16/ Initial monitoring data "K22-VAH\_Measuring Data\_2012-05-01 to 2012-12-31 V2"

#### **Category 2 Documents:**

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

- /1/ Photo-pressure transmitter type ST-3000, fabrication # 08W18C3059154001003
- /2/ Photo-flare unit type KGU 5/8, fabrication # 142401
- /3/ Photo-pressure transmitter type P121-E02-311, fabrication # Ex812127132.
- /4/ Photo-pressure transmitter type ST-3000, fabrication # 08W18C3059154001001
- /5/ Photo-flare unit control display
- /6/ Photo-pressure transmitter type STD120-A1A-00000-MB-POD2-4113, fabrication # 010100INH20
- /7/ Photo-pressure transmitter type P121- EE5-311, fabrication # Ex812127135.
- /8/ Photo-resistance transmitter type JUMO, fabrication #TN005159880126483001008370003
- /9/ Photo-pressure transmitter type ST-3000, fabrication # 08W30C3088100001001
- /10/ Photo-pressure transmitter type P121-E02-311, fabrication # Ex812127126.
- /11/ Photo-Emission reduction units automated monitoring system
- /12/ Calibration certificate # 1820 dated 28/09/2012, valid till 28/09/2013, on pressure transducer type P121-E02-311, fabrication # Ex812126966, issued by Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification State Enterprise
- /13/ Calibration certificate # 1807 dated 28/09/2012, valid till 28/09/2013, on pressure transducer type ST-3000, fabrication # 08W18C3059154001003, issued by Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification State Enterprise
- /14/ Passport on resistance transmitter type TCПУ 1-3, fabrication # 09453 (last calibration date-11/04/2012)
- /15/ Passport on resistance transmitter type TCПУ 1-3, fabrication # 09439 (last calibration date-11/04/2012)
- /16/ Passport on resistance transmitter type TCΠУ 1-3, fabrication # 09454 (last calibration date-11/04/2012)
- /17/ Passport on standard orifice, registration # 40 (last calibration date-17/04/2012)
- /18/ Passport on standard orifice, registration # 41 (last calibration



- date-17/04/2012)
- /19/ Passport on resistance transmitter type TCПУ 1-3, fabrication # 09441 (last calibration date-11/04/2012)
- /20/ Passport on standard orifice, registration # 39 (last calibration date-17/04/2012)
- /21/ Passport on standard orifice, registration # 501871 (K22-F1) (last calibration date-21/09/2012)
- /22/ Passport on resistance transmitter type JUMO, fabrication # 98026 (last calibration date-11/09/2012)
- /23/ Calibration certificate # 1719 dated 13/09/2012, valid till 13/09/2013, on pressure transducer type P121-E02-311, fabrication # Ex812126961, issued by Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification State Enterprise
- # 1718 Calibration certificate 13/09/2012. /24/ dated till 13/09/2013, pressure transducer type P121-E02-311, on fabrication # Ex812127126, issued by Sumy Regional Scientific Production Centre for Standardization, Metrology Certification State Enterprise
- /25/ Calibration certificate # 1717 dated 13/09/2012, valid till 13/09/2013, on pressure transducer type ST-3000, fabrication # 08W18C3059154001001, issued by Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification State Enterprise
- /26/ Calibration certificate # 1716 dated 13/09/2012, valid till 13/09/2013, on pressure transducer type ST-3000, fabrication # 08W30C3088100001001, issued by Sumy Regional Scientific and Production Centre for Standardization, Metrology and Certification State Enterprise
- /27/ Passport on standard orifice, registration # 491973 (last calibration date-11/09/2012)
- /28/ Failure, interruption journal for the period from 25/03/2012 to 23/12/2012
- /29/ Gas generator (Coal Mine № 22 "Kommunarskaya") emergency cases journal for the period since 06/05/2012 to 23/12/2012
- /30/ Logbook on operation of VAH ERUS AAS (Coal Mine № 22 "Kommunarskaya") for the period since 21/03/2012 to 24/12/2012
- /31/ Flare unit # 2 (Coal Mine № 22 "Kommunarskaya") operation logbook for the period from 30/05/2012 to 19/12/2012
- /32/ Logbook on operation of ERUs AAS (Coal Mine № 22 "Kommunarskaya") for the period since 31/05/2012 to 27/11/2012
- /33/ Certificate # 676 dated 11/04/2012 (valid till 11/04/2013) on pressure transmitter type Sitrans P, fabrication # N1-A011-9174903
- /34/ Certificate # 680 dated 11/04/2012 (valid till 11/04/2013) on pressure transmitter type P121-E02-311, fabrication # Ex812127127



- /35/ Certificate # 677 dated 11/04/2012 (valid till 11/04/2013) on pressure transmitter type Sitrans P, fabrication # AZB/XD188388
- /36/ Certificate # 678 dated 11/04/2012 (valid till 11/04/2013) on pressure transmitter type Sitrans P, fabrication # AZB/XD188387
- /37/ Certificate # 671 dated 11/04/2012 (valid till 11/04/2013) on pressure difference transmitter type Sitrans P, fabrication # N1-A011-9174904
- /38/ Certificate # 679 dated 11/04/2012 (valid till 11/04/2013) on pressure transmitter type P121- EE5-311, fabrication # Ex812126972
- /39/ Agreement # 82 dated 07/03/2011 between Sumy Scientific and Production Centre for Standardization, Metrology and Eco-Alliance LLC on providing metrological services
- /40/ Agreement # 24/704-71/11 dated 28/03/2011 between Donetsk Scientific and Production Centre for Standardization, Metrology and Certification and Makiiivka Scientific and Research Institute on Safety in Mines on providing metrological services
- /41/ Agreement # 1792034317 dated 2012 between Makiiivka Scientific and Research Institute on Safety in Mines and PJSC "Colliery Group "DONBAS" on providing research and technical services
- /42/ Certificate # 5637 on measurement device calibration (ser. # 75) dated 19/12/2012. It is valid to 19/12/2013
- /43/ Operational instruction. Order of commissioning of the gas engines (device type NC620V16K, No. 167001). The document is dated 08/06/2012
- /44/ Statement of commissioning (protocol of acceptance) of the device type NC620V16K, No. 167001 dated 08/06/2012
- /45/ Statement of acceptance-transferring. Commissioning of the device type NC620V16K, No. 167001 dated 08/06/2012
- /46/ Protocol of training of the maintenance staff (the device type NC620V16K, No. 167001) dated 08/06/2012
- /47/ Statement that justify the end of flare operation (ser. # 1256) on 27.06.2012
- /48/ Operational instruction of the equipment Himpe AG (annular chamber standard orifice DIN 19205)
- /49/ Operational instruction of the equipment Honeywell ST3000
- /50/ Operational instruction of the equipment Noeding
- /51/ Operational instruction of the equipment JUMO GmbH & Co. KG (90.2002)
- /52/ User Manual of the equipment Landis & Gyr Combimeter
- /53/ Operational instruction of the equipment DEIF AGC
- /54/ Photo Electricity meter ser. #67 460 277
- /55/ Photo Electronical load counter ser. #500040675.10



#### **VERIFICATION REPORT**

#### Persons interviewed:

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

- /1/ Viktor Orlov chief engineer of PJSC "COLLIERY GROUP "DONBAS"
- /2/ Karl Woste Senior consultant, Carbon-TF B.V.
- /3/ Adam Hadulla Director Business Development, Carbon-TF B.V.
- /4/ Viktor Avtonomov Monitoring Assistant of LLC "Eco-Aliance"
- /5/ Mykola Shliakhta Coal Mine № 22 "Kommunarskaya" Chief Engineer
- /6/ Tetiana Balashova Mining Works Lead Engineer of the Coal Mine № 22 "Kommunarskaya"
- /7/ Andriy Zherdyev coal mine Senior Power Engineer of the Coal Mine № 22 "Kommunarskaya"
- /8/ Mark Synhayevskiy degassing department Head of the Coal Mine № 22 "Kommunarskaya"
- /9/ Victor Vasylevych Heating Engineer of the Coal Mine № 22 "Kommunarskaya"
- /10/ Vitaliy Sobolyev ventilation department Head of the Coal Mine № 22 "Kommunarskaya"



VERIFICATION REPORT

#### 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
Project app	provals by Parties involved			
90	Party involved, other than the host Party, issued a written project approval when submitting the first verification	The project has been approved by both the host Party (Ukraine) and the other Party involved (the Netherlands). The written project approvals were issued by DFPs of the Parties involved (see section References in the verification report).	OK	OK
91	approvals by Parties involved unconditional?	The written project approvals by Parties involved are unconditional.	OK	ОК
	plementation			014
92		In this project CMM (coal mine methane), which has been sucked out of the active		OK



				VERTIAS
DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	coal mine Coal Mine $\mathbb{N}$ 22 "Kommunarskaya", has been utilised in flares, cogeneration units, boilers and a ventilation air heater. The methane has been burned to less harmful $CO_2$ . The cogeneration unit has generated power which has displaced conventionally produced power and gained an additional amount of $CO_2$ reductions.		
		Corrective Action Request 01 (CAR01).  Monitoring Report section A.1 and section D.3 has incorrect reference on Annex 5.  Please make amendments.	CAR01	ОК
		Corrective Action Request 02 (CAR02). On the one hand, the Monitoring Report section A.6 states: "The second cogeneration has not been installed yet. See A.7 for further details." On the other hand, the section A.3, the section A.6 and other sections states that the second cogeneration unit has been installed during the regarded monitoring period. Moreover, the section A.7 previously referenced to does not contain relevant information. Please bring the information in consistency through the Monitoring Report.	CAR02	OK
		Corrective Action Request 03 (CAR03).	CAR03	ОК



		VERITAS
eck Item Initial finding	Draft	Final
	Conclusion	Conclusion
documents review, the AIE can conce that no revisions to the project monitor plan were occur within the report period. The section A.8 of the Monitor Report version 2 includes the information about revisions to the register monitoring plan that were alrest determined during the previous monitoring periods. Please consider issue and provide clear description in section A.8 of the Monitoring Report.  Corrective Action Request 04 (CAR Monitoring Report version 2 states Nr. 3873/11/10/08 issued by the I party (Ukraine); but the LoA of Ukraine has other number such Nr. M000016. Please explain why Host party LoA number was changed provide amendments if it is necessary Corrective Action Request 05 (CAR Please revise the information provide Annex 4. Pay your special attention the information provided in table that related to changes in capacity of ventilation air heater. Please consideration in the second consideration in the second consideration air heater. Please consideration in the second consideration in the second consideration air heater. Please consideration consideration in the second consideration air heater. Please consideration	and lude bring ring ation ered eady rious the athe as the as the and c. CAR05 ed in a on at is the	OK
	Based on the results of the site visit documents review, the AIE can conditate that no revisions to the project monitor plan were occur within the repoperiod. The section A.8 of the Monitor Report version 2 includes the information about revisions to the regist monitoring plan that were alrest determined during the previous and provide clear description in section A.8 of the Monitoring Report.  Corrective Action Request 04 (CAR Monitoring Report version 2 states Nr. 3873/11/10/08 issued by the party (Ukraine); but the LoA of Ukraine has other number such Nr. M000016. Please explain why Host party LoA number was changed provide amendments if it is necessary Corrective Action Request 05 (CAR Please revise the information provided Annex 4. Pay your special attention the information provided in table that related to changes in capacity of	Based on the results of the site visit and documents review, the AIE can conclude that no revisions to the project monitoring plan were occur within the reporting period. The section A.8 of the Monitoring Report version 2 includes the information about revisions to the registered monitoring plan that were already determined during the previous monitoring periods. Please consider the issue and provide clear description in the section A.8 of the Monitoring Report.  Corrective Action Request 04 (CAR04). Monitoring Report version 2 states LoA Nr. 3873/11/10/08 issued by the Host party (Ukraine); but the LoA of the Ukraine has other number such as Nr. M000016. Please explain why the Host party LoA number was changed and provide amendments if it is necessary. Corrective Action Request 05 (CAR05). Please revise the information provided in Annex 4. Pay your special attention on the information provided in table that is related to changes in capacity of the ventilation air heater. Please consider



				VERITAS
DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
93	What is the status of operation of the project during the monitoring period?	In this project CMM (coal mine methane), which has been sucked out of the active coal mine Coal Mine № 22 "Kommunarskaya", has been utilised in flares, cogeneration units, boilers and a ventilation air heater. The methane has been burned to less harmful CO2. The cogeneration unit has generated power which has displaced conventionally produced power and gained an additional amount of CO2 reductions.  In June 2012 Flare 2 has been shut down and has been moved off the site.  A second cogeneration unit has been installed in June 2012 and started production on 08/06/2012.  The ventilation air heater was working only for a short period of time from October 2012 till December 2012.		ОК
Compliance	with monitoring plan	Corrective Action Request 06 (CAR06). JI project activity on the shut-down of the flare 2 and installation of the second cogeneration unit should be justified with documents. Please provide documented evidences of the project equipment installation within the reporting period.	CAR06	ОК
Compilation	with monitoring plan			



				VERITAS
DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
94	Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed	·		OK
	final and is so listed on the UNFCCC JI website?	JI project is implemented in compliance with the approved consolidated methodology ACM0008. Section A.5.2 of the Monitoring Report has incorrect reference on the selected methodology.	CAR07	OK
		Please correct. Clarification Request 01 (CL01). Please clarify in which way the parameter P14 (methane destroyed by flaring $MD_{FL}$ ) is calculated.	CL01	ОК
95 (a)	For calculating the emission reductions or enhancements of net removals, were key 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	of the project and the emissions as well as risks associated with the project are taken into account. It is described in the monitoring report and revised monitoring plan that was determined during this		
	associated with the project taken into account, as appropriate?	Clarification Request 02 (CL02). Please clarify the data sources of the data provided in Table 2 of the section A.3.	CL02	ОК



				VERITAS
DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	Yes, all data sources used for calculating emission reductions are clearly identified, reliable and transparent.	OK	OK
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission	consumption, Carbon dioxide emission factor for combusted methane, CO <sub>2</sub> emission factor of fuel used for captive power or heat, Carbon dioxide emission	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 manner?	Details of the calculation of emission reductions are provided in Excel calculation spreadsheets supported to the Monitoring Report.  Corrective Action Request 08 (CAR08). The section D.3.1of the MR states: "The monitored values are higher than the prospected values in 2012 because of the installation of the second and third flares at the shafts of the coal mine." According	CAR08	OK



				VERITAS
DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
raragrapii		to results of the site visit and documents revision, the verification team can conclude that the second flare was shut down in June 2012 and the third flare was put into operation in 2010. Please, provide the explanation of the difference between emission reductions planned in the PDD and actually achieved values of emission reductions indicated in the Monitoring Report taking into account JI project activity within the current reporting period and bring information into compliance through the MR.  Corrective Action Request 09 (CAR09). Please update the reference to Excel calculation spreadsheet using the latest	CAR09	OK
		version (see section D.3 of the Monitoring Report).  Corrective Action Request 10 (CAR10). Please bring the value of total emission reduction for the monitoring period 01/05/2012-31/12/2012 into conformity with the Excel calculation spreadsheet and throughout the Monitoring Report. Pay your special attention on the section D.3.4 of the MR.  Corrective Action Request 11 (CAR11). Please update the date of monitoring report preparation in the section D.3.4 of	CAR10 CAR11	ОК



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DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
Paragraph		the Monitoring Report.  Clarification Request 03 (CL03). The Excel calculation spreadsheet the column that concerns the Efficiency of methane destruction/oxidation in power plant (P16) states the reference to the value: "not required because MM <sub>ELEC</sub> =0 for the whole monitoring period". At the same time the value mentioned above is used for calculation and the separate column that concerns the Methane sent to power plant (MM <sub>ELEC</sub> ) provides monthly values for the current monitoring period. Please provide explanation.	CL03	OK
<b>Applicable</b>	to JI SSC projects only			
96	Is the relevant threshold to be classified as JI SSC project not exceeded during the monitoring period on an annual average basis?  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?		N/A	N/A
	to bundled JI SSC projects only			
97 (a)	Has the composition of the	Not applicable	N/A	N/A



	-			VERITAS
DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	bundle not changed from that is stated in F-JI-SSCBUNDLE?			
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	Not applicable	N/A	N/A
98	If the monitoring is based on a monitoring plan that provides for overlapping 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?		N/A	N/A
Revision of	f monitoring plan			
	only if monitoring plan is revise	ed by project participant		
99 (a)	Did the project participants provide an appropriate justification for the proposed			



DVM	Check Item	Initial finding	Draft	Final
Paragraph	Oneck item	initial finaling	Conclusion	
Paragraph	revision?	Corrective Action Request 15 (CAR15). Please, consider revision included in the current Monitoring Report according to the following algorithm: 1) essence of revision; 2) reason for this revision; and	CAR15	OK
		3) what it can improve (e.g., applicability, accuracy, etc.). Also, explicitly state whether proposed revisions improve 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 and selected methodology ACM0008.		
99 (b)	Does the proposed revision improve the accuracy and/or 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?	accuracy and applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and	OK	ОК
Data manag		JI project activity is implemented in line	OK	OK
(\a)	1.5 mpromontation of data	c. p. eject detirity to impromonted in into	<u> </u>	<u> </u>



				VERITAS
DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	with the revised monitoring plan that was determined during the monitoring period 01/05/2012-31/12/2012 (i.e., in the frame of the fourth periodic verification).		
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	Measurement equipment of the JI project is installed and should be calibrated in accordance to the requirements. The measurement devices have been calibrated in time. But some issues were raised.		
		Corrective Action Request 12 (CAR12). Section B.1.2 of Monitoring Report provides last calibration date of the flow meter serial #41 (ID35) as 07/04/2012. But the documented evidence state that the date of calibration of this device is 17/04/2012. Please correct.	CAR12	ОК
		Corrective Action Request 13 (CAR13). The calibration status of the measurement equipment ID2, ID46, ID47, ID48, ID49, ID50, and ID51 should be justified. Please provide documented evidences.	CAR13	ОК
		Corrective Action Request 14 (CAR14). Incorrect references on the measurement equipment are provided in section A.3.3 of the Annex 3. Take into account	CAR14	ОК



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
raragrapii		relevant devises described in Table 5 of the MR. Please provide amendments.		Concretion
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	Yes, the evidence and records used for the monitoring and emission reduction calculation are maintained in a traceable manner.	ОК	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 JI project is implemented in line with the revised monitoring plan that was determined during that monitoring period (i.e., the fourth periodic verification).		
		Clarification Request 04 (CL04). Please clarify whether any training was performed in the frame of JI project during the monitoring period 01/05/2012-31/12/2012.	CL04	ОК
Verification	n regarding programmes of activ	ities (additional elements for assessment	:)	
102	Is any JPA that has not been added to the JI PoA not verified?		N/A	N/A
103	Is the verification based on the monitoring reports of all JPAs to be verified?	Not applicable	N/A	N/A



DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	Not applicable	N/A	N/A
104	Does the monitoring period not overlap with previous monitoring periods?	Not applicable	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?	Not applicable	N/A	N/A
Applicable	to sample-based approach only			
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 representative of the JPAs in the JI PoA such extrapolation to all JPAs identified for that		N/A	N/A



				VERITAS
DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	verification is reasonable, taking into account differences among the characteristics of JPAs, such as:  - The types of JPAs;  - The complexity of the applicable technologies and/or measures used;  - The geographical location of each JPA;  - The amounts of expected emission reductions of the JPAs being verified;  - The number of JPAs for which emission reductions are being verified;  - The length of monitoring periods of the JPAs being verified;  - The samples selected for prior verifications, if any?			
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	Not applicable	N/A	N/A
108	Has the AIE made site	Not applicable	N/A	N/A



DVM	Check Item	Initial finding	Draft	Final
Paragraph	Oneck item	initial initiality		Conclusion
	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 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 ex ante assessment? (Optional)	Not applicable	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?	Not applicable	N/A	N/A

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# Table 2 Resolution of Corrective Action Requests and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	
Corrective Action Request 01 (CAR01). Monitoring Report section A.1 and section D.3 has incorrect reference on Annex 5. Please make amendments.		MR was corrected.	Issue is closed based on the amendments that were made in the revised version of the monitoring report (MR).
Corrective Action Request 02 (CAR02). On the one hand, the Monitoring Report section A.6 states: "The second cogeneration has not been installed yet. See A.7 for further details." On the other hand, the section A.3, the section A.6 and other sections states that the second cogeneration unit has been installed during the regarded monitoring period. Moreover, the section A.7 previously referenced to does not contain relevant information. Please bring the information in consistency through the Monitoring Report.	Table 1, 92	MR was corrected.	Clarification was provides in revised version of the MR. So, issue is closed.



			VERITAS
Draft report clarifications and	Ref. to	Summary of project participant	Verification team conclusion
corrective action requests by	checklist	response	
validation team	question		
	in table 1		
Corrective Action Request 03	Table 1,	MR was corrected.	The information was clarified
(CAR03). Based on the results of	92		in the MR. Issue is closed.
the site visit and documents review,			
the AIE can conclude that no			
revisions to the project monitoring			
plan were occur within the reporting			
period. The section A.8 of the			
Monitoring Report version 2			
includes the information about			
revisions to the registered			
monitoring plan that were already			
determined during the previous monitoring periods. Please consider			
the issue and provide clear			
description in the section A.8 of the			
Monitoring Report.			
Womtoring Report.			
Corrective Action Request 04	Table 1,	M000016 is not the number of the	Issue is closed because of
(CAR04). Monitoring Report version	92	LoA but the number of the form.	clarification.
2 states LoA Nr. 3873/11/10/08			
issued by the Host party (Ukraine);			
but the LoA of the Ukraine has			
other number such as Nr. M000016.			
Please explain why the Host party			
LoA number was changed and			
provide amendments if it is			
necessary.			



			VERITAS
Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
Corrective Action Request 05 (CAR05). Please revise the information provided in Annex 4. Pay your special attention on the information provided in table that is related to changes in capacity of the ventilation air heater. Please consider and provide clarification.	Table 1, 92	The explanation was provided.	Issue is closed.
Corrective Action Request 06 (CAR06). JI project activity on the shut-down of the flare 2 and installation of the second cogeneration unit should be justified with documents. Please provide documented evidences of the project equipment installation within the reporting period.	Table 1, 93	Documents were provided (i.e., instruction, statements, and protocol).	The requested documented evidences were reviewed and found in order. Thus, issue is closed.
Corrective Action Request 07 (CAR07). JI project is implemented in compliance with the approved consolidated methodology ACM0008. Section A.5.2 of the Monitoring Report has incorrect reference on the selected	Table 1, 94	Response 01. All the references are given in Annex 1. Response 02. MR was corrected.	Conclusion on response 01.  Mistake is in section A.5.2 of the Monitoring Report, namely, the MR states: "Applicability requirements for the monitoring plan of the ACM008 methodology are



Draft report clarifications and	Ref. to	Summary of project participant	Verification team conclusion
corrective action requests by validation team	checklist question in table 1	Summary of project participant response	verification team conclusion
methodology. Please correct.			identical to respective requirements of the baseline setting." Please correct.  Conclusion on response 02. Issue is closed.
Corrective Action Request 08 (CAR08). The section D.3.1 of the MR states: "The monitored values are higher than the prospected values in 2012 because of the installation of the second and third flares at the shafts of the coal mine." According to results of the site visit and documents revision, the verification team can conclude that the second flare was shut down in June 2012 and the third flare was put into operation in 2010. Please, provide the explanation of the difference between emission reductions planned in the PDD and actually achieved values of emission reductions indicated in the Monitoring Report taking into account JI project activity within the current reporting period and bring	Table 1, 95 (d)	MR was corrected.	Explanation was provided in the updated version of the monitoring report. Thus, issue is closed.



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
information into compliance through the MR.			
Corrective Action Request 09 (CAR09). Please update the reference to Excel calculation spreadsheet using the latest version (see section D.3 of the Monitoring Report).	Table 1, 95 (d)	MR was corrected.	According to the provided amendments, issue is closed.
Corrective Action Request 10 (CAR10). Please bring the value of total emission reduction for the monitoring period 01/05/2012-31/12/2012 into conformity with the Excel calculation spreadsheet and throughout the Monitoring Report. Pay your special attention on the section D.3.4 of the MR.	Table 1, 95 (d)	The values are the same. The rounding is applied in whole Excel table for correct matching sums and cross sums in most cases impossible without rounding. This procedure was discussed and confirmed with BV team during second monitoring period.	Issue is closed.
Corrective Action Request 11 (CAR11). Please update the date of monitoring report preparation in the section D.3.4 of the Monitoring Report.	Table 1, 95 (d)	MR was corrected	The information in th section D.3.4 of the monitoring report was modified. Issue is closed.
Corrective Action Request 12	Table 1,	MR was corrected.	In the updated version of the



			VERITAS
Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
(CAR12). Section B.1.2 of Monitoring Report provides last calibration date of the flow meter serial #41 (ID35) as 07/04/2012. But the documented evidence state that the date of calibration of this device is 17/04/2012. Please correct.	101 (b)		MR the information on measurement equipment is in conformity with documented evidences.
Corrective Action Request 13 (CAR13). The calibration status of the measurement equipment ID2, ID46, ID47, ID48, ID49, ID50, and ID51 should be justified. Please provide documented evidences.	Table 1, 101 (b)	Response 01. The calibration passport for measurement equipment ID2 is provided (i.e., Certificate on measurement device calibration). For other meters there are no calibration certificates as these meters are new and unused and will be calibrated in June 2013 Response 02. Documents were provided. Explanation was given.	Please provide the passports on the measurement devices
Corrective Action Request 14 (CAR14). Incorrect references on	Table 1, 101 (b)	MR was corrected.	Required amendments were made. Issue is closed.
the measurement equipment are			



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
provided in section A.3.3 of the Annex 3. Take into account relevant devises described in Table 5 of the MR. Please provide amendments.			
Clarification Request 01 (CL01). Please clarify in which way the parameter P14 (methane destroyed by flaring MD <sub>FL</sub> ) is calculated.	Table 1, 94	P14 is MDELEC! P11, MDFL is calculated in the way described in the comment. MDFL = MMFL*EffFL with EffFL depending on the flame temperature: 0% below 500℃ 90% 500℃ to 850℃ 99.5% above 850℃ This is also described in the Annex of the MR and the RMP.	Issue is closed.
Clarification Request 02 (CL02). Please clarify the data sources of the data provided in Table 2 of the section A.3.	Table 1, 95(a)	The data of Table 2 is taken from the Excel sheet, specifically columns H, M, N, L, BF, BG, BB. MR was corrected.	
Clarification Request 03 (CL03). The Excel calculation spreadsheet the column that concerns the Efficiency of methane destruction/oxidation in power plant (P16) states the reference to the	Table 1, 95 (d)	This statement was left from previous verification. The comment was deleted in the Excel-sheet.	Issue is closed due to the correction and provided clarification.



			VERITAS
Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
value: "not required because MM <sub>ELEC</sub> =0 for the whole monitoring period". At the same time the value mentioned above is used for calculation and the separate column that concerns the Methane sent to power plant (MM <sub>ELEC</sub> ) provides monthly values for the current monitoring period. Please provide explanation.			
Clarification Request 04 (CL04). Please clarify whether any training was performed in the frame of JI project during the monitoring period 01/05/2012-31/12/2012.	Table 1, 101 (d)	During current monitoring period no new personnel were employed so no new training was conducted.  MR was corrected.	Clarification was described in updated version of the monitoring report. According to the clarification, issue is closed.
Corrective Action Request 15 (CAR15). Please, consider revision included in the current Monitoring Report according to the following algorithm: 1) essence of revision; 2) reason for this revision; and 3) what it can improve (e.g., applicability, accuracy, etc.). Also, explicitly state whether proposed revisions	Table 1, 99 (a)	Information related to the revision was provided in section A.8 of the monitoring report.	Revision was described in a proper way and justify with a documented evidences. So, the issue is closed.



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
improve 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 and selected methodology ACM0008.			