

VERIFICATION REPORT

PUBLIC JOINT STOCK COMPANY "COLLIERY GROUP "POKROVSKE"

VERIFICATION OF THE

"CMM UTILISATION ON THE JOINT STOCK COMPANY "COAL COMPANY KRASNOARMEYSKAYA ZAPADNAYA NO 1 MINE"

3rd periodic

REPORT NO. UKRAINE-VER/0384/2011

REVISION NO. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

| Date of first issue: | Organizational unit: |
|-----------------------------|------------------------------|
| | |
| 01/12/2011 | Bureau Veritas Certification |
| | Holding SAS |
| Client: | Client ref.: |
| Public Joint Stock Company | Petryshena Lyudmyla |
| "Colliery Group "Pokrovske" | |

Summary:

Bureau Veritas Certification has made the 3rd periodic verification for the period from 01 March 2011 to 31 October 2011 of the "CMM utilisation on the Joint Stock Company "Coal Company Krasnoarmeyskaya Zapadnaya № 1 Mine", JI Registration Reference Number 0105, project of Public Joint Stock Company "Colliery Group "Pokrovske" located in Krasnoarmiysk 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 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 Actions Requests, Forward Actions Requests (CR, 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 144470 tons of CO2eq for the monitoring period from 01/03/2011 to 31/10/2011.

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.

| Report No.: UKRAINE-ver/0384/2011 Project title: | Subject Group: JI | | |
|--|--|-----------|---|
| "CMM utilisation on the Joi Company Krasnoarmeyska | nt Stock Company "Coal /a Zapadnaya № 1 Mine" | | |
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| Ivan Sokolov - Internal Tech Nikolay Chekhmestrenko – | nical Reviewer Technical Specialist | \square | No distribution without permission from the Client or responsible organizational unit |
| Work approved by: | | | |
| Flavio Gomes – Operationa | l Manager | | Limited distribution |
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Abbreviations

| AIE Accredited indepe | endent Er | itity |
|-----------------------|-----------|-------|

- BVC Bureau Veritas Certification Holding SAS
- CAR Corrective Action Request
- CDM Clean Development Mechanism
- CH₄ Methane
- CL Clarification Request
- CMM Coal Mine Methane
- CO₂ 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

Public Joint Stock Company "Colliery Group "Pokrovske" has commissioned Bureau Veritas Certification (BVC) to verify the emissions reductions of its JI project "CMM utilisation on the Joint Stock Company "Coal Company Krasnoarmeyskaya Zapadnaya № 1 Mine" (hereafter called "the project") at Krasnoarmiysk 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 1st March 2011 to 31st October 2011.

1.1 Objective

Verification is the periodic independent review and ex post determination by the Accredited Independent Entity (AIE) 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:

Svitlana Gariyenchyk

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Vladimir Lukin

Bureau Veritas Certification Team Member, Climate Change Verifier

Vladimir Kulish

Bureau Veritas Certification Team Member, Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov Bureau Veritas Certification, Internal Technical Reviewer

Nikolay Chekhmestrenko 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.



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

2.1 Review of Documents

The Monitoring Report (MR) submitted by Public Joint Stock Company "Colliery Group "Pokrovske" and additional background documents related to the project design, baseline, and monitoring plan, 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 to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version 1 of 20 October 2011, ver.2 of 16 November 2011, ver.3 of 25 November 2011, and project as described in the determined PDD.

2.2 Follow-up Interviews

On 24/10/2011 Bureau Veritas Certification verification team conducted a visit to the project site (Public Joint Stock Company "Colliery Group "Pokrovske") and performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Company "Colliery Group "Pokrovske" and Eco-Alliance Ltd. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

| Interviewed | Interview topics |
|-------------------|--|
| organization | |
| PJSC "Colliery | Organizational structure |
| Group "Pokrovske" | 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 |
| Eco-Alliance Ltd. | Monitoring plan |
| | Revision to the monitoring plan |
| | Monitoring report |

| Table 1 Intervi | ew topics |
|-----------------|-----------|
|-----------------|-----------|



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Deviations from PDD.

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 AIE 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.

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 8 Corrective Action Requests, 17 Clarification Requests and 1 Forward Action Request.



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

3.1 Remaining issues and FARs from previous verifications

During the previous 2^{nd} periodic verification conducted for the period of 01/04/2010 - 28/02/2011 by BVC one Forward Action Request was issued:

FAR01. The evidences (e.g., calibration certificates) of the due calibration status of all meters used in the project monitoring during the whole monitoring period (including those which were replaced in course of the monitoring period) must be kept and made available upon request; the records confirming the meters replacement, if applicable, are to be maintained as well.

As a response to the Clarification Request raised by BVC regarding this issue, the project participants provided the required records during the site visit. Based on the submitted documentation the FAR01 from the previous verification 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 No2239/11/10-08, issued on 22/02/2008. 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. 2008JI02, dated 22/04/2008).

The abovementioned written approvals are unconditional.

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

The present JI project implies utilization of CMM from two suction systems and from drainage wells on the surface of the coal mine "Krasnoarmeyskaya Zapadnaya № 1" for heat and power generation and for flaring.

The project has not been implemented as planned. In the considered monitoring period only one upgraded boiler and one flare were operational. Since the last verification the installation of the flare has been completed, the flare started operation on 26/10/2010. The



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installation of the cogeneration units at Central Shaft is still in progress, and remained unfinished until the current monitoring period. The status of project activity implementation compared with the PDD is presented in the table below:

| Table 2. | Status | of | implementation | including | updated | timetable | for | project |
|----------|--------|----|----------------|-----------|---------|-----------|-----|---------|
| compone | ent | | | | | | | |

| Unit | Planned installation date, as stated in the PDD | Implementation status and updated timetable | | | |
|-----------------------|--|---|--|--|--|
| Central Shaft | | | | | |
| upgraded boiler | Oct 2003 | October 2003 | | | |
| flare No: 1 | Jan 2008 | 1 flare with firing capacity of 25 MW installed in October 2010 | | | |
| flare No: 3 | Mar 2008 | See above | | | |
| cogeneration units | Jul 2008 | 6 cogeneration units are under installation; the commissioning is planned for October 2011 | | | |
| Degassing wells | | | | | |
| flare/pump No: 2 | Jan 2008 | delayed; installation is planned for the end of 2011 or early 2012 | | | |
| flare/pump No: 7 | Apr 2008 | delayed; installation is planned for the end of 2011 or early 2012 | | | |
| Air Shaft № 2 | | | | | |
| flares No: 4-6 | Apr 2008 | delayed; installation is planned for the end of 2011 or early 2012 | | | |
| cogeneration units | Jun-Oct 2008 | delayed; installation is planned for the end of 2011 or early 2012 | | | |
| cogeneration units | Jan 2009 | delayed; the installation is planned for the end of 2011 | | | |

As mentioned and evident from the table above, there were changes to the project's design as described in the PDD that occurred after the determination had been deemed final. Those changes concern the delay in installation of most project components (flares at degassing wells, flares and cogeneration units at Air Shaft No.2) are caused by lacking funds due to the global financial crisis and should follow in the end of 2011 or early 2012.



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No areas of concern as to the project implementation were identified.

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 is so listed on the UNFCCC JI website and the monitoring plan which was revised and positively determined in the course of previous verification.

For calculating the emission reductions, key factors, such as availability and amount of extracted coal 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, specific carbon dioxide non direct emissions factors for consumption of electricity generated by power stations of united energy system of Ukraine, sectoral standards, IPCC guidelines, laboratory analyses 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.

No areas of concern as to the compliance of the monitoring plan with the monitoring methodology were identified.

3.5 Revision of monitoring plan (99-100)

There was no revision of monitoring plan in the current monitoring period.

Verification procedure was carried out in accordance with the revised monitoring plan ver.5, approved during the previous verification (Documents #2 and # 3 listed among Category 1 Documents of Section 5 References of the present Verification Report).

3.6 Data management (101)

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



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

Two different data collection and processing systems are used for the upgraded boiler and flare unit. The data for the boiler are collected, processed and stored using a Siemens SIMATIC PLC S7 system and Siemens WINCC programming software. One time per hour the data are sent via GPS to an Internet-based Server data base. The data can be read any time from the internet data base by the authorized personnel. Eco-Alliance ensures regular back ups and archiving.

For the flare and the cogeneration units the equipment supplier Sinapse has provided a system for data collecting, archiving and sending to Internet, called Graphic Data Manager RSG 40 Memograph M. The data are stored in the memory of computer for 6 months. Every month coal mine personnel save the data into the flash memory and transfer it to Eco-Alliance.

Eco-Alliance together with coal mine personnel conduct periodic audits of the project monitoring process including service audits. The regular backup is performed for the monitoring data.

For plausibility checks and potential data back up the monitored data are logged in the hand written journals of the suction system.

The monitoring activities including data collection procedures, the quality control and the quality assurance procedures are written down in the project Monitoring Manual that is to be updated with the start of the cogeneration plant operation by the end of the year 2011. This issue is the subject for a check during the subsequent verification.

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 monitoring plan.

The general project management is implemented by the Technical Director of the «Colliery Group «Pokrovske» through supervising and coordinating activities of his subordinates, such as the degasification engineer, heating technician, and safety engineering departments. The project management structure is presented in the MR section C.1.1.

Daily a group of mechanics and electricians who are responsible for the measures and maintenance of all technological equipment and measuring



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instruments are present on-site; during each of 12 hour-shift there is a person on-duty responsible for the proper operation and keeping of the journals. The general supervision of the monitoring system is executed by the administration of the coal mine under the existing control and reporting system.

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 FAR 01, CAR 02, CAR 05, CAR 04, CAR 06, CAR 07, CAR 08, CAR 03, CL 07, CL 10, CL 14, CL 16, CL 01 – CL 06, CL 08, CL 09, CL 11, CL12, CL15, CL13, CL 17).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the 3rd periodic verification for the period from 01 March 2011 to 31 October 2011 of the "CMM utilisation on the Joint Stock Company "Coal Company Krasnoarmeyskaya Zapadnaya № 1 Mine" project 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 monitoring reports, 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 PJSC "Colliery Group "Pokrovske" 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 revised monitoring plan ver.5, approved during the previous verification. The



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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 3, for the reporting period from 01/03/2011 to 31/10/2011 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 01/03/2011 to 31/10/2011

| Baseline emissions | : 167612 | t CO2 equivalents; |
|---------------------|----------|--------------------|
| Project emissions | : 23142 | t CO2 equivalents; |
| Emission Reductions | : 144470 | t CO2 equivalents. |

5 REFERENCES

Category 1 Documents:

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

- Project Design Document of the project "CMM utilisation on the /1/ Joint Stock Company "Coal Company Krasnoarmeyskaya Zapadnaya № 1 Mine", version 04 dated 10/09/2008 Verification Report "CMM utilisation on the Joint Stock Company "Coal Company Krasnoarmeyskaya Zapadnaya № 1 Mine"
- /2/ No. UKRAINE-ver/0199/2010, revision 02 of 27/05/2011 including Determination of the revisions to the project design and Determination of the Revised Monitoring Plan
- /3/ Revised Monitoring Plan version 5 of 18/05/2011
- /4/ Monitoring Report for the period from 01/03/2011 till 30/09/2011 version 1 dated 20/10/2011



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- /5/ Monitoring Report for the period from 01/03/2011 till 31/10/2011 version 2 dated 16/11/2011
- /6/ Monitoring Report for the period from 01/03/2011 till 31/10/2011 version 3 dated 25/11/2011
- /7/ Calculation of Emission Reductions excel file "ER-KAZ1-2011-03-01 to 2011-09-30_V1.xls", Version 1 of 20/10/2011
 Calculation of Emission Reductions – excel file "ER-KAZ1-2011-
- /8/ 03-01 to 2011-10-31.V2.xls", Version 2 of 16/11/2011
- ^{/o/} Calculation of Emission Reductions excel file "ER-KAZ1-2011-03-01 to 2011-10-31.V3.xls", Version 3 of 25/11/2011
- /9/ Flare measuring data- excel file "KAZ1-F1_Measuring_Data_2011-03-01 to 2011-10-31.V2.xls", Version 2
- /10/ Upgraded boiler measuring data- excel file "KAZ1-B1_Measuring_Data_2011-03-01 to 2011-10-31.V2.xls", Version 2

Category 2 Documents:

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

- /1/ Approved consolidated baseline methodology ACM0008 version 03 "Consolidated baseline methodology for coal bed methane and coal mine methane capture and use for power (electrical or motive) and heat and/or destruction by flaring"
- /2/ Methodological "Tool to determine project emissions from flaring gases containing methane"
- /3/ Guidance on Criteria for Baseline Setting and Monitoring, version 02, JISC
- /4/ Photo Boiler #1 25/14, serial #4022 (registration #46801)
- /5/ Logbook on shift change by KE 25/14 gas boiler operators
- /6/ Logbook on shift change by boiler engine operators
- /7/ Logbook on shift change by boiler engine operators (methaneoxygen compound concentration)
- /8/ Photo ERU monitoring system, boiler house
- /9/ Logbook on methane utilization for the period from 28/02/2011 till 24/10/2011
- /10/ Gas analyzer type Polytron IR, serial #ARSK-0191
- /11/ Photo Boiler operation control sensors
- /12/ Acceptance certificate dated 02/2011 on gas analyzer type M02-01, serial #1098 (calibrated on 02/03/2011)
- /13/ Photo Gas analyzer type M02-01, serial #1098
- /14/ Photo Flare unit



| /15/ | Photo – Gasholder |
|------|---|
| /16/ | Photo – Flare unit automatic control system |
| /17/ | Operational journal of flare unit HOFGAS-IFL4c9000 |
| /18/ | List of personnel who underwent monitoring management training (HOFGAS-IFL4c9000 unit) |
| /19/ | Logbook of personnel training for HOFGAS-IFL4c9000 unit operation |
| /20/ | Emergency cases journal of HOFGAS-IFL4c9000 unit (15/10/2011) |
| /21/ | Register of persons who have access to device |
| /22/ | Failure, interruption journal of HOFGAS-IFL4c9000 unit for the period from 16/07/2011 till 24/10/2011 |
| /23/ | Logbook on metering values of power meter type SL 761E071 SL7000 Smart №53024005 for the period from 03/09/2011 till 24/10/2011 |
| /24/ | Capture and utilization of coal mine methane (main industrial site) |
| /25/ | Statement dated 26/10/2010 of working committee on acceptance of finished by construction building |
| /26/ | Parts substitution journal |
| /27/ | Report dated 26/05/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /28/ | Report dated 28/05/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /29/ | Report dated 01/06/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /30/ | Report dated 30/06/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /31/ | Report dated 05/07/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /32/ | Report dated 07/07/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /33/ | Report dated 13/07/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /34/ | Report dated 03/06/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /35/ | Report dated 19/08/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /36/ | Report dated 02/06/2011 on activity (flare unit HOFGAS-IFL4c9000, #10244) |
| /37/ | Logbook on calibration of gas analyzer type NGA-5 #4009.87 (GAE CH4 #A1538, GAE O2 #A1528) for the period from 12/04/2011 till 20/10/2011 |
| /38/ | Passport and Acceptance certificate dated 14/07/2010 on pressure transducer type МТМ700ДИ-Ex, serial #1595 |



| /39/ | Operational journal of flare unit HOFGAS-IFL4c9000 |
|------|--|
| /40/ | Passport and Acceptance certificate dated 14/07/2010 on pressure transducer type MTM201Д, serial #3401 |
| /41/ | Passport and Acceptance certificate dated 14/07/2010 on transformer type MTM201Д, serial #3401 |
| /42/ | Passport 590.282.030ΠC and Acceptance certificate dated 06/2010 on transformer type TCM-1088, serial #1138 |
| /43/ | Passport 311.04.00.000ПС and Acceptance certificate dated 20/07/2010 on gas sensor type ДРГ.МЗЛ-200-400, serial #10144 |
| /44/ | Passport 311.03.00.000P9 and Acceptance certificate dated 06/07/2010 on flow-meter type BBP.M, serial #10512 (calibration dated 06/07/2010) |
| /45/ | Manual and Acceptance certificate dated 26/04/2011 on flow-meter type БВР.М, serial #14033 (calibration dated 26/04/2011) |
| /46/ | Protocol dated 21/10/2011 on consideration of additional agreement to the Contract #23/12 dated 10/01/2011 |
| /47/ | Blank #6247 on reconciliation of additional agreement to the Contract #23/12 dated 10/01/2011 (starting date – 04/10/2011, closing date – 19/10/2011) |
| /48/ | Justification on necessity to conclude additional agreement to the Contract #23/12 dated 10/01/2011 |
| /49/ | Letter #15937 dated 03/10/2011 on reconciliation of additional agreement to the Contract #23/12 dated 10/01/2011 |
| /50/ | Additional agreement to the Contract #23/12 dated 10/01/2011 |
| /51/ | Protocol on reconciliation of works (services) cost to the Contract #23/12 dated 10/01/2011 |
| /52/ | Letter #12138/15-52 dated 21/09/2011 on reconciliation of additional agreement to the Contract #23/12 dated 10/01/2011 |
| /53/ | Statement dated 23/10/2011 on inquiry of accident that took place at cogeneration unit section at Public Joint Stock Company «Colliery Group «Pokrovs'ke» during the I shift on 16/08/2011 |
| /54/ | Description of VEGABAR pressure transducers for the State measuring equipment inventory (approved on 14/07/2010) |
| /55/ | Certificate #UA-MI/2p-3443-2010 on conformity of VEGABAR pressure transducers to the claimed type, valid till 14/07/2013 |
| /56/ | Registration number in VEGA Grieshaber KG company maintenance data base (#20108320) |
| /57/ | Passport on flare unit gas preparation system drive control panel #924 (inventory #2115) |
| /58/ | Results dated 25/02/2011 of as samples analysis taken 21/02/2011, issued by the Respirator SRIMRO measuring laboratory |
| /59/ | Certificate #583A-44/11 on oxygen-gas compound, issued 19/07/2011 |
| /60/ | Contract #891 of 30/09/2011 on providing metrological services concluded with SE "Sumystandartmetrologiya" |



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- /61/ Certificate #PK010-2009 on authorization of SE "Donetskstandartmetrologiya" to carry out calibration works issued on 17/04/2009, valid till 17/04/2014
- /62/ Certificate #PK029-2009 on authorization of SE "Sumystandartmetrologiya" to carry out calibration works issued on 28/12/2009, valid till 28/12/2014
- /63/ Additional agreement dated 26/10/2011 to the contract #23/12 dated 10/01/2011 on providing metrological services concluded with Donetsk scientific and production center for standardization, metrology and certification
- /64/ Passport for thermocouple #436-11 (last calibration date 11.08.2011)
- /65/ Passport for Metran-150TG current sensor, fabrication #932847
- /66/ Passport for MTM201D transmitter, fabrication #3401
- /67/ Protocol on training to carry out calibration of a type NGA-S gas analyser dated 25/12/2010
- /68/ Certificate for Rockwell Automation software programme
- /69/ Certificate for Siemens software programme
- /70/ Accreditation certificate of "Respirator" laboratory #VL-001-2009 issued on 10/12/2009, valid till 09/12/2014
- /71/ Instruction #54 on labor protection for operators of steam and water heating boilers
- /72/ Monthly reports on services provided by "Eco-Alliance"
- /73/ Calibration certificate on GAECH4 analyzer, serial #A1538, issued by NUK
- /74/ Passport: Actaris electric power meter type SL761E071, serial #53024005
- /75/ Passport: Resistance thermometer type TSPU 1-3N, serial #09436
- /76/ Calibration certificate #5425: Gas analyzer NGA5, fabrication #4009.87 issued on 28/10/2011, valid till 28/10/2012
- /77/ Order #57/1 dated 25/11/2011 on saving information that refers to the project activity

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/ Yevhen Khalimendikov- Chief Engineer, 1st Deputy General Director of PJSC "Colliery Group "Pokrovske"
- /2/ Artem Dmytryk Head of the cogeneration department of PJSC "Colliery Group "Pokrovske"



- /3/ Maksym Chernykov Head of the cogeneration department of PJSC "Colliery Group "Pokrovske"
- /4/ lakiv Artiuhov- Head of the heating department of PJSC "Colliery Group "Pokrovske"
- /5/ Oleksandr Skochko Head of the degasation department of PJSC "Colliery Group "Pokrovske"
- /6/ Oleksii Hulai Head of the ventilation and safety unit department
- /7/ Dmytro Kozhemiakin Head of the energy department of PrJSC "Donetskstal"
- /8/ Pavlo Sheleheda Deputy Director of "Eco-Aliance" Ltd.
- /9/ Viktor Avtonomov JI project manager of "Eco-Aliance" Ltd.
- /10/ Artyom Sorokin CHP dispatcher
- /11/ Sergey Buryak CHP dispatcher



VERIFICATION REPORT

APPENDIX A: PROJECT VERIFICATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

VERIFICATION PROTOCOL

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

| DVM | Check Item | Initial finding | Draft | Final |
|--------------|---|--|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| Project app | ovals by Parties involved | | | |
| 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 the host Party (Ukraine) and the other Party involved (the Netherlands). The written project approvals were issued by DFPs of Parties involved; the respective Letters of Approval were available at the beginning of 1 st verification of the project. CAR 01. There is no explanation as for what the asterisk in the table indicating the parties involved stands for. Please, provide explanation on the same page. | CAR01 | OK |
| 91 | Are all the written project approvals by Parties involved unconditional? | Yes, all the written project approvals by Parties involved are unconditional. | ОК | ОК |
| Project impl | ementation | | | |
| 92 | Has the project been implemented in accordance with the PDD regarding | The project has not been implemented as planned in the PDD. There were changes to project design that | ОК | OK |



| DVM | Check Item | Initial finding | Draft | Final |
|-----------|--|--|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| | which the determination has been deemed final and is so listed on the UNFCCC JI website? | occurred after the determination had been deemed final. First of all, there was a delay in implementation of almost all project units, except upgraded boiler which started its operation in October 2003 as scheduled in the PDD and Flare 1 with the capacity of 25 MW that has been installed in October 2010. The cogeneration units have not been put into operation in the current monitoring period. At the time of on site verification they were working in testing and commissioning regime. Other project activities were delayed because of lacking of funds due to the global financial crisis. | | |
| | | Accordingly, the emission reductions achieved are much lower than those planned in the PDD. | | |
| 93 | What is the status of operation of the project during the monitoring period? | There was delay in project implementation as scheduled in the PDD caused by lacking funds due to the global financial crisis. During the given monitoring period only one upgraded boiler and one flare were operational. The upgraded boiler has been in operation since October 2003. The flare unit at Central Shaft was commissioned on 26/10/2010. The installation of the cogeneration units (6 units) at Central Shaft is in progress and remained unfinished until the end of this monitoring period. The installation of further project units (flares at degassing wells, flares and cogeneration units at Air Shaft No.2) should follow late in 2011 or early 2012. | OK | OK |



| DVM Paragraph | Check Item | Initial finding | Draft Conclusion | Final Conclusion |
|------------------|--|---|---------------------|---------------------|
| | | The status of project activity implementation compared to the PDD is presented in the section A.6 of the Monitoring Report. | | |
| Compliance | with monitoring plan | | | |
| 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 with some changes presented in the revised monitoring plan which was positively determined in course of the previous 2 nd verification. | ОК | 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) of the DVM, 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? | Key factors, such as availability and amount of extracted coal gas, concentration of methane in the extracted gas 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. | ОК | ОК |
| 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 MR sections B.1.2, B.2.1 to B.2.4. The data sources used in the present monitoring period include: - direct measurement of the CMM amount sent to the flare and the boiler, heat generation by the project, | ОК | ОК |



| DVM | Check Item | Initial finding | Draft | Final |
|-----------|---|--|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| | | methane concentration and the flare flame temperature performed with appropriate calibrated measurement equipment (flow meter, pressure transmitter, resistance temperature meter etc.); laboratory analysis of NMHC concentration in the extracted gas; IPCC data for efficiency of methane destruction/oxidation in the power and heat plants, carbon emission factor for combusted methane, methane GWP, emission factor for fuel (coal) used for captive power or heat; equipment specification (boiler passport) for energy efficiency of coal fired heat plant. | | |
| 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 applied in calculation of the emission reduction for this monitoring period, such as carbon emission factor for combusted methane and CO_2 emission factor of fuel used for captive power or heat, are selected by carefully balancing accuracy and reasonableness, and are appropriately justified of the choice. Both factors were taken from IPCC Guidelines. | ОК | ОК |
| 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? | The performed calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner. The continuation of situation exciting before project 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, | OK | OK |



| DVM | Check Item | Initial finding | Draft | Final |
|------------|---|---|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| | | was proven in the determined PDD to be the most | | |
| | | The results of emission reduction calculation are | | |
| | | presented in the MR as a totals for 10 months of 2011 | | |
| Applicable | a ILSSC projects only | | | |
| | Is the relevant threshold to be classified | N/2 | N/a | N/a |
| 90 | as IL SSC project not exceeded during | ιν/a | IN/a | IN/a |
| | the monitoring period on an appual | | | |
| | avorago basis? | | | |
| | If the threshold is exceeded is the | | | |
| | maximum emission reduction level | | | |
| | estimated in the PDD for the II SSC | | | |
| | project or the bundle for the monitoring | | | |
| | period determined? | | | |
| Applicable | to bundled II SSC projects only | | | |
| 97(a) | Has the composition of the bundle not | N/a | N/a | N/a |
| 57 (u) | changed from that is stated in F-II- | | IN/C | IN/C |
| | SSCBLINDLE? | | | |
| 97 (b) | If the determination was conducted on the | N/a | N/a | N/a |
| 07 (0) | hasis of an overall monitoring plan have | | n,a | n va |
| | the project participants submitted a | | | |
| | common monitoring report? | | | |
| 98 | If the monitoring is based on a monitoring | N/a | N/a | N/a |
| 00 | plan that provides for overlapping | | n va | i va |
| | monitoring periods, are the monitoring | | | |
| | periods per component of the project | | | |
| | | | | |
| 1 | clearly specified in the monitoring report? | | | |



| DVM Paragraph | Check Item | Initial finding | Draft Conclusion | Final Conclusion |
|--------------------|---|--|----------------------------------|--|
| | with those for which verifications were already deemed final in the past? | | | |
| Revision of | monitoring plan | | 1 | 1 |
| Applicable of | only if monitoring plan is revised by proje | ct participant | | |
| 99 (a) | Did the project participants provide an appropriate justification for the proposed revision? | N/a | N/a | N/a |
| 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? | N/a | N/a | N/a |
| Data manag | ement | | | |
| 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. The previous verification reports contain the information that monitoring activities including data collection procedures, QA & QC procedures are written down in the project Monitoring Manual. However, no such document was provided to BVC during site-visit, thus the issue is raised: | FAR 01 CAR02 CL06 CAR05 | To be checked during the subsequent verification OK OK OK |
| | | FAR 01. Please, provide for review the updated project Monitoring Manual, if available. | | |



| DVM Paragraph | Check Item | Initial finding | Draft Conclusion | Final Conclusion |
|------------------|--|---|--|----------------------------------|
| | | CAR 02. The title of Table 1 is <i>Amount of methane utilised for heat generation and flaring</i> but the Table itself doesn't comprise the data on the quantity of methane flared for the monitoring period. | | |
| | | Please provide the missed data | | |
| | | CL 06. Please, explain and make it clear in the MR as well in what way the boiler house personnel is instructed for the case of possible troubles and danger and provide documented instructions for the personnel | | |
| | | CAR 05. It was revealed during on site verification that there is no written instruction at the enterprise on archiving of project data in accordance with the UNFCCC requirements. | | |
| 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. Still, some issues as to the used monitoring equipment which need to be corrected or clarified were indentified: CAR 04. There is no serial number for the thermocouple that has been used since the end of August up to the end of the current monitoring period. Please, provide it. CL 07. Please provide the documented evidences of the due calibration status for the project measuring | CAR04 CL07 CL10 CL14 CAR06 CAR07 CAR08 CL16 | OK OK OK OK OK OK |



| DVM | Check Item | Initial finding | Draft | Final |
|-----------|------------|---|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| | | equipment presented in Table 4 of the MR under ID | | |
| | | numbers from 8 to 10,13,17, 18,19 . | | |
| | | CL 10. Please, provide information in Section B.4. or | | |
| | | give references to where this information could be | | |
| | | found in other sections of the MR on the equipment | | |
| | | broken and changed as a result of a lightning stroke | | |
| | | indicating the inventory numbers of both the broken | | |
| | | and changed equipment | | |
| | | CL 14. Please provide documented evidence to prove | | |
| | | that the internal personnel that carries out calibration of | | |
| | | the gas analyzers is authorized and trained to do that | | |
| | | kind of works in accordance with DSTU 3989:2000 | | |
| | | paragraph 4.10. | | |
| | | CAR 06. The dates of substitution of spare parts and | | |
| | | broken equipment indicated in the supporting | | |
| | | documents and the ones presented in Table 4 of the | | |
| | | MR differ. Please, check this and make appropriate | | |
| | | corrections. | | |
| | | CAR 07. According to the passport for a measuring | | |
| | | transmitter MTM 201D #3401 (ID16) the calibration | | |
| | | period for it has expired on 14/07/2011. There were no | | |
| | | documents presented to prove that a subsequent | | |
| | | calibration was made. | | |
| | | CAR 08. According to the passport for a resistance | | |
| | | thermometer TSM-1088 #1138 (ID15) the calibration | | |
| | | period for it has expired in June 2011. There were no | | |
| | | documents presented to prove that a subsequent | | |
| | | calibration was made. | | |



| DVM | Check Item | Initial finding | Draft | Final |
|-----------|--|--|---|--|
| Paragraph | | CL 16. According to the Commission Statement dated 23/10/2011 on accident that took place at cogeneration unit section on 16/08/2011 as a result of lightening stroke, several parts of equipment was inappropriate for further operation and decommissioned. Based on this Statement the following question arise: -What unit A.1.2.1769-1F16C was changed for? - Were the spark safety barriers KFD-2-CD-E1.32 and TI816 substituted? What kind of equipment were they substituted for? - Please, specify the serial/inventory numbers of the new equipment and present their certificates/ passports, if applicable | Conclusion | Conclusion |
| 101 (c) | Are the evidence and records used for the monitoring maintained in a traceable manner? | All necessary information for monitoring of GHGs emission reductions is stored in paper or/and electronic formats. CL 01. Please, provide documented evidence on the amount of methane utilised, heat generated and methane flared CAR 03. Please, check the name of the reference system used by Google in Section A.6. p.3 of the MR and make appropriate corrections. If available, please also provide explanation on what the abbreviated name of that system stands for. CL 02. Please, provide the required data for the NMHC concentration in Table 4 of the MR or explain why they | CL01 CAR03 CL02 CL03 CL04 CL05 CL08 CL09 CL11 CL12 CL15 CL17 | OK OK OK OK OK OK OK OK |



| DVM | Check Item | Initial finding | Draft | Final |
|-----------|------------|---|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| | | are unavailable | | |
| | | CL 03. Please, explain why the third parties involved are indicated in different sections B.1.3 and C.2. | | |
| | | CL 04. Please, provide documented evidence on the audits made by an Eco-Alliance monitoring engineer every 2 weeks. Please, make it clear where those internal audits are conducted | | |
| | | CL 05. Please, provide monthly reports referred to the current monitoring period prepared by Eco-Alliance | | |
| | | CL 17. Please, submit the accreditation certification of the laboratory which undertook the NMHC analysis of the captured gas. Note, that lab's accreditation validity during the whole monitoring period must be confirmed. | | |
| | | CL 08. Please provide service contracts with the companies providing maintenance and calibration works for the project equipment, as well as documented evidence proving that they are authorized/certified to carry out those kinds of works with the accreditation scopes, if applicable | | |
| | | CL 09. Please, include in Section B.2.6. of the MR justification on why data concerning environmental impacts are not applicable for the current monitoring period. | | |
| | | CL 11. Please, provide license for the Siemens WINCC programming software. | | |



| DVM Paragraph | Check Item | Initial finding | Draft Conclusion | Final Conclusion |
|------------------|---|---|---------------------|---------------------|
| | | CL 12. Please, submit verification certificates for the SIMATIC PLC S7 system maintenance services provided by Eco-Alliance | | |
| | | CL 15. Please provide data on methane utilization and the flare unit operation for October 2011 (scanned from the operational journals) | | |
| 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 operational systems and found them eligible for reliable project monitoring. | CL13 | ОК |
| | | CL13. Please, provide justification of the Graphic Data Manager RSG 40 Memograph M system validity to collect and archive data referring to the flare and cogeneration units. | | |
| Verification | regarding programs of activities (addition | nal elements for assessment) | | |
| 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 | N/a | N/a | N/a |



| DVM | Check Item | Initial finding | Draft | Final |
|--------------|---|-----------------|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| | with previous monitoring periods? | | | |
| 105 | If the AIE learns of an erroneously | N/a | N/a | N/a |
| | included JPA, has the AIE informed the | | | |
| | JISC of its findings in writing? | | | |
| Applicable t | o 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 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; | N/a | N/a | N/a |
| | The length of monitoring periods of the JPAs being verified; and | | | |



| DVM | Check Item | Initial finding | Draft | Final |
|-----------|---|-----------------|------------|------------|
| Paragraph | | | Conclusion | Conclusion |
| | 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? | 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 number, then does the AIE provide a reasonable explanation and justification? | N/a | N/a | N/a |
| 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 |



VERIFICATION REPORT

Table 2 Resolution of Corrective Action 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 | Verification team conclusion |
|--|--|--|---|
| CAR 01. There is no explanation as for what the asterisk in the table indicating the parties involved stands for. Please, provide explanation on the same page | 90 | The MR was corrected. | The explanation has been provided. CAR01 is closed. |
| CAR 02. The title of Table 1 is Amount of methane utilised for heat generation and flaring but the Table itself doesn't comprise the data on the quantity of methane flared for the monitoring period. Please provide the missed data | 101 (c) | The data in Table 1 is the total methane amount from flaring and heat generation, as stated above the table. This is a short summary of the project results. The detailed information on flaring and heat generation is stated in the tables in Chapter D. | Issue is closed as the required corrections have been made. |
| CL 01. Please, provide documented evidence on the amount of methane utilised, heat generated and methane flared | 101 (c) | The evidence is attached: <u>Measuring data.rar</u> | Further explanations required for verification have been submitted. CL01 is closed. |



| CAR 03. Please, check the name of the reference system used by Google in Section A.6. p.3 of the MR and make appropriate corrections. If available, please also provide explanation on what the abbreviated name of that system stands for. | 101 (c) | Response #1: The MR was corrected. The WGS term stands for World Geodetic System. The latest revision is WGS 84 (dating from 1984 and last revised in 2004). | Conclusion on response #1: Please, insert this explanation to the MR and also explain what these coordinates refer to. Final conclusion: |
|--|---------|---|---|
| | | <i>Response #2:</i> The MR was corrected. | to the MR. Issue is closed. |
| CL 02. Please, provide the required data for the NMHC concentration in Table 4 of the MR or explain why they are unavailable | 101 (c) | The MR was corrected. | The required data have been provided. CL02 is closed. |
| CAR 04. There is no serial number for the thermocouple that has been used since the end of August up to the end of the current monitoring period. Please, provide it | 101 (b) | The serial number of the last thermocouple is 436-11 and it's indicated in the MR. | The serial number of the equipment has been added. CAR04 is closed. |
| CL 03. Please, explain why the third parties involved are indicated in different sections B.1.3 and C.2. | 101 (c) | This is coming from the template. MR was corrected. | The MR template was modified appropriately. The third parties involved in the project are indicated in section C.2. now. Issue is closed. |



| CL 04. Please, provide documented evidence on the audits made by an Eco-Alliance monitoring engineer every 2 weeks. Please, make it clear where those internal audits are conducted | 101 (c) | Response #1:The audit made by Eco-Alliance monitoring engineer represents the checking of the handwritten journal and making a mark on the page of the journal.Response #2:The audits mentioned above are performed at the Boilerhouse section in the operational journal.MR was corrected. | Conclusion on response #1: Not closed. Please, explain at what facilities the internal audits are conducted and what journal is meant <i>Final conclusion:</i> The internal audit procedure carried out within the enterprise is described in detail in section C.3. of the MR. CL 04 is closed. |
|---|---------|--|--|
| CL 05. Please, provide monthly reports referred to the current monitoring period prepared by Eco-Alliance | 101 (c) | Response #1: The monthly reports are attached: KZ-1 - Monthly reports.pdf Response #2: The required documents are attached: Measuring data.rar | Conclusion on response #1: Issue is not closed as the presented are monthly reports on technical services provided. <i>Final conclusion:</i> CL05 is closed based on the required documents provided to the verifiers. |
| CL 06. Please, explain and make it clear in the MR as well in what way the boiler house personnel is instructed for the case of possible troubles and danger and provide documented instructions for the personnel | 101 (a) | The boiler house personnel is instructed under the Instruction of work safety for boiler operators: <u>KZ-2 - Boiler instruction.pdf</u> | The work safety instruction has been provided. CL 06 is closed. |



| FAR 01. Please, provide for review the updated project Monitoring Manual, if available. | 101 (a) | The Monitoring Manual will be updated after the commissioning of the Cogeneration Station at the Central Shaft. | To be checked during the subsequent verification |
|---|---------|--|--|
| CL 17. Please, submit the accreditation certification of the laboratory which undertook the NMHC analysis of the captured gas. Note, that lab's accreditation validity during the whole monitoring period must be confirmed. | 101 (c) | The accreditation certification is attached: KZ-3 - Accreditation certification.jpg | The required certificate has been submitted; issue is closed. |
| FAR 01. (from the previous verification) The evidences (e.g., calibration certificates) of the due calibration status of all meters used in the project monitoring during the whole monitoring period (including those which were replaced in course of the monitoring period) must be kept and made available upon request; the records confirming the meters replacement, if applicable, are to be maintained as well. | | The evidences (e.g., calibration certificates) of the due calibration status of all meters used in the project monitoring during the whole monitoring period (including those which were replaced in course of the monitoring period) were given to BV during the site visit. | The required evidences were provided to the verifiers during the site visit. Issue is closed. |



| CL 07. Please provide the documented evidences of the due calibration status for the project measuring equipment presented in Table 4 of the MR under ID numbers from 8 to 10,13,17, 18,19. | 101 (b) | Response #1: The documents are attached: KZ-4 - Documents.rar Response #2: Missing documents are attached: KZ-15 - Missing documents.rar | Conclusion on response #1: Issue is not closed. The calibration period for gas analyzer (ID number 17 in Table 4 of the MR) according to the provided calibration certificate has expired on 06/07/2011. The documented evidences of the due calibration status for the project measuring equipment presented in Table 4 of the MR under ID numbers 9, 10, 18 has not been provided. <i>Final conclusion:</i> All missing documents have been submitted. Issue is closed. |
|---|---------|---|--|
| CL 08. Please provide service contracts with the companies providing maintenance and calibration works for the project equipment, as well as documented evidence proving that they are authorized/certified to carry out those kinds of works with the accreditation scopes, if applicable | 101 (c) | The documents are attached: KZ-5 - Calibration contracts.rar | The submitted service contracts were reviewed and found appropriate. Issue is closed. |



| CL 09. Please, include in Section B.2.6. of the MR justification on why data concerning environmental impacts are not applicable for the current monitoring period. | 101 (c) | Response #1: The coal mine is not measuring and publishing officially environmental impacts. | Conclusion on response #1: Issue is not closed as the required justification has not been provided. |
|--|---------|--|--|
| | | <i>Response #2:</i> MR was corrected. | Final conclusion:The clarification and subsequentcorrectionswerefoundappropriate. CL 09 is closed. |
| CL 10. Please, provide information in Section B.4. or give references to where this information could be found in other sections of the MR on the equipment broken and changed as a result of a lightning stroke indicating the inventory numbers of both the broken and changed equipment | 101 (b) | Information concerning broken equipment is given in Section B.4. Information concerning serial numbers of broken and changed equipment is given in Table 4 of Section B.1.2. | Issue is closed based on the clarification provided and corrections made to the MR. |
| CL11. Please, provide license for the Siemens WINCC programming software. | 101 (c) | The document is attached: KZ-6 - Siemens software certificates.pdf | The required documentation on the software system has been provided. CL 11 is closed. |
| CL 12. Please, submit verification certificates for the SIMATIC PLC S7 system maintenance services provided by Eco-Alliance | 101 (c) | The document is attached: KZ-6 - Siemens software certificates.pdf | The required documentation on the software system has been provided. CL 12 is closed. |
| CL13. Please, provide justification of the Graphic Data Manager RSG 40 Memograph M system validity to collect and archive data referring to the flare and cogeneration units. | 101 (d) | The document is attached: KZ-7 - Certificate.jpg | Issue is closed based on the required justification provided. |



| | | | - |
|--|---------|---|--|
| CL 14. Please provide documented evidence to prove that the internal personnel that carries out calibration of the gas analyzers is authorized and trained to do that kind of works in accordance with DSTU 3989:2000 paragraph 4.10. | 101 (b) | The document is attached: KZ-8 - Personnel training_Gasanalyzer calibration.jpg | The provided documentation was reviewed and found to be appropriate. Issue is closed. |
| CL 15. Please provide data on methane utilization and the flare unit operation for October 2011 (scanned from the operational journals) | 101 (c) | The documents are attached: <u>KZ-9 - Boiler.jpg</u> <u>KZ-10 - Flare.jpg</u> | The required data for October 2011 has been provided. Issue is closed. |
| CAR 05. It was revealed during on site verification that there is no written instruction at the enterprise on archiving of project data in accordance with the UNFCCC requirements. | 101 (a) | Instruction is attached. KZ-11 - Instruction.jpg | The instruction has been issued by the authorities of the enterprise and submitted for verification. Issue is closed. |
| CAR 06. The dates of substitution of spare parts and broken equipment indicated in the supporting documents and the ones presented in Table 4 of the MR differ. Please, check this and make appropriate corrections. | 101 (b) | The MR was corrected | The appropriate correction was made; issue is closed. |
| CAR 07. According to the passport for a measuring transmitter MTM 201D #3401 (ID16) the calibration period for it has expired on 14/07/2011. There were no documents presented to prove that a subsequent calibration was made. | 101 (b) | The new certificate is attached: <u>KZ-12 - MTM 201-D.jpg</u> | The updated certificate has been presented to the verifiers. Issue is closed. |



| CAR 08. According to the passport for a resistance thermometer TSM-1088 #1138 (ID15) the calibration period for it has expired in June 2011. There were no documents presented to prove that a subsequent calibration was made. | 101 (b) | Resistance thermometer TSM-1088 is a part of the meter for CMM temperature measuring together with measuring transmitter MTM 201D and was calibrated with indicated above. MR was corrected. | The clarification and subsequent corrections to the MR have been made. CAR 08 is closed. |
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| CL 16. According to the Commission Statement dated 23/10/2011 on accident that took place at cogeneration unit section on 16/08/2011 as a result of lightening stroke, several parts of equipment was inappropriate for further operation and decommissioned. Based on this Statement the following question arise: -What unit A.1.2.1769-1F16C was changed for? - Were the spark safety barriers KFD-2-CD-E1.32 and TI816 substituted? What kind of equipment were they substituted for? - Please, specify the serial/inventory numbers of the new equipment and present their certificates/ passports, if applicable | 101 (b) | Unit A.1.2.1769-1F16C was changed for similar equipment: <u>KZ-14 - Block of analog inputs.rar</u> Spark safety barriers KFD-2-CD-E1.32 and TI816 were not substituted. | The clarification and subsequent corrections to the MR has been made. Issue is closed. |