

VERIFICATION REPORT LLC "ENERGY TECHNOLOGY COMPANY "ENERGOALIANS"

VERIFICATION OF THE REDUCTION OF NATURAL GAS EMISSIONS AT PJSC "CREAMGAS"

INITIAL AND FIRST PERIODIC FOR THE PERIOD 01/01/2008 – 30/09/2012

REPORT NO. UKRAINE-VER/0778/2012 REVISION NO. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

Date of first issue:			
26/10/2012	Organizational unit: Bureau Veritas Holding SAS	Certification	
Client: LLC «Energy Technology Company «ENERGOALIANS»	Client ref. Kardash Yur	іу	
Summary: Bureau Veritas Certification has made the emissions at PJSC "Creamgas" of co- located in the AR Crimea (except for specific approach, on the basis of UNFC project operations, monitoring and repor- rules and modalities and the subsequi- country criteria.	mpany «LLC «Ener Sevastopol, Feodos CCC criteria for the J orting. UNFCCC crite	gy Technology Company «ENE iya and Kerch towns), Ukraine , as well as criteria given to pro- ria refer to Article 6 of the Kyo	ERGOALIANS» is and applying JI vide for consistent to Protocol, the JI
The verification scope is defined as a per- Entity of the monitored reductions in G following three phases: i) desk review monitoring plan; ii) follow-up interviews issuance of the final verification report Verification Report & Opinion, was cond The first output of the verification pro Actions Requests (CR, CAR and FAR),	HG emissions during of the monitoring re with project stakeho ort and opinion. Th lucted using Bureau V cess is a list of Cla	defined verification period, and port against project design and ders; iii) resolution of outstandi e overall verification, from Co /eritas Certification internal proc rification, Corrective Actions R	d consisted of the the baseline and ng issues and the intract Review to edures.
In summary, Bureau Veritas Certification approved project design documents. In runs reliably and is calibrated appropria GHG emission reductions. The GHG e omissions, or misstatements, and the monitoring period from 01/01/2008 to 30	nstalled equipment b ately. The monitoring mission reduction is ERUs issued totali	eing essential for generating e system is in place and the pro calculated accurately and witho	mission reduction bject is generating ut material errors,
Our opinion relates to the project's G related to the approved project baseline	HG emissions and r and monitoring, and	esulting GHG emission reducti its associated documents.	ons reported and
Report No.: Subject Group UKRAINE-ver/0778/2012 JI	p:		
Project title: "Reduction of natural gas emission "Creamgas"	ns at PJSC		
	Leader Member		
Ivan Sokolov – Internal Technical Re Bureau Veritas Cert Work approved by: Ivan Sokolov – Operational Manage	ification S	No distribution without permiss Client or responsible organizat	
	per of pages:	Limited distribution Unrestricted distribution	



VERIFICATION REPORT

Table of Contents Page 1 1.1 Objective 3 1.2 Scope 3 1.3 Verification Team 3 2 2.1 **Review of Documents** 4 2.2 Follow-up Interviews 4 2.3 Resolution of Clarification, Corrective and Forward Action Requests 5 3 3.1 Remaining issues and FARs from previous verifications 6 Project approval by Parties involved (90-91) 3.2 6 Project implementation (92-93) 3.3 7 Compliance of the monitoring plan with the monitoring methodology 3.4 7 (94-98)Revision of monitoring plan (99-100) 8 3.5 3.6 Data management (101) 8 Verification regarding programmes of activities (102-110) 3.7 8 4 5



VERIFICATION REPORT

1 INTRODUCTION

LLC «Energy Technology Company «ENERGOALIANS» has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI "Reduction of natural gas emissions at PJSC "Creamgas" (hereafter called "the project") is located in the AR Crimea (except for Sevastopol, Feodosiya and Kerch towns), 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

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

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

1.3 Verification Team

The verification team consists of the following personnel:

Oleg Skoblyk Bureau Veritas Certification Team Leader, Climate Change Verifier

Volodymyr Kulish



VERIFICATION REPORT

Bureau Veritas Certification Technical Specialist

This determination report was reviewed by:

Ivan Sokolov Bureau Veritas Certification Internal Technical Reviewer

2 METHODOLOGY

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

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

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

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

2.1 Review of Documents

The Monitoring Report (MR) submitted LLC «Energy Technology Company «ENERGOALIANS» and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), and/or Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version(s) 01 and 02 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 15/10/2012 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve



VERIFICATION REPORT

issues identified in the document review. Representatives of PJSC "Creamgas" and LLC "Energy Technology Company "ENERGOALIANS" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1Interview topics

Interviewed organization	Interview topics
PJSC "Creamgas"	Organizational structure 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
CONSULTANT: LLC "Energy Technology Company "ENERGOALIANS"	Internal audits and check-ups Baseline methodology Monitoring plan Monitoring report Excel spreadsheets

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.



VERIFICATION REPORT

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

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

3 VERIFICATION CONCLUSIONS

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 8 Corrective Action Requests and 1 Clarification Request.

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 FARs were raised during determination.

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

Written project approval by the Ukraine #3078/23/7 dated 18/10/2012 has been issued by the State Environmental Investment Agency of Ukraine.

Written project approval by Ministry of the Environment of Estonia (Letter of Approval #12-1/8652) was received for the proposed project on 12/10/2012.

The abovementioned written approvals are unconditional.

The identified areas of concern as to the Project approval by Parties involved, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CAR 01, CAR 02).



VERIFICATION REPORT

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

In accordance with PDD, version 03 dated 19/09/2012, the project boundaries include the places of methane leakages due to non hermeticity of gas equipment GDP (CGDP), gas armature, flanged and threaded joints of gas-distributing networks of PJSC «Creamgas». In total the project's boundaries include equipment of 1 475 GDP (CGDP) and 14 690 units of gas armature. During the accounting monitoring period were repaired (replaced) gas equipment of 431 GDP (CGDP) and 5 140 units of gas armature. PJSC «Creamgas» complete repairs of the gas equipment of all GDP (CGDP) and all gas armatures, which was included to the JI project boundaries, during accounting monitoring period. Quantity of repaired (replaced) equipment of GDP (CGDP) and gas armature of gasdistributing networks of PJSC «Creamgas» by periods is given in Table 2 the PDD, version 03 dated 19/09/2012.

Project measures for current monitoring period (01/01/2008 -30/09/2012) also involved subsequent Purposeful Examination and Technical Maintenance (PETM) of all gas equipment of GDP (CGDP) and gas armature, which were repaired (replaced) out of schedule for the whole period of JI project.

The gas equipment of GDP (CGDP) and gas armature of gas pipelines repaired (replaced) during previous periods of project activity is inspected regularly, as component part of standard monitoring activity, to ascertain, that they do not become the source of emissions again.

Current repair of gas equipment according to the Monitoring Plan, given in PDD, version 03, is carried out once per year, and maintenance is performed once per half-year.

The identified areas of concern as to the project implementation, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CAR 03, CL 01).

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

There are no deviations to the registered monitoring plan.

The monitoring occurred in accordance with the monitoring plan included in the PDD version 03 dated 19/09/2012 regarding which the determination has been deemed final and is so listed on the UNFCCC JI website.

For calculating the emission reductions, key factors influencing the baseline emissions and the activity level of the project and the emissions



VERIFICATION REPORT

as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions are clearly identified, reliable and transparent.

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

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

The identified areas of concern as to the compliance of the monitoring plan with the monitoring methodology, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CAR 04).

3.5 Revision of monitoring plan (99-100)

Not applicable

3.6 Data management (101)

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

The implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures. These procedures are mentioned in the section "References" of this report.

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

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

The data collection and management system for the project is in accordance with the monitoring plan.

The identified areas of concern as to the data managemet, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CARs 05 - 08).

3.7 Verification regarding programmes of activities (102-110)

Not applicable



VERIFICATION REPORT

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the initial and 1st periodic verification of the "Reduction of natural gas emissions at PJSC "Creamgas" Project in Ukraine, which applies JI specific approach. 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 "Energy Technology Company "ENERGOALIANS" is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring Plan indicated in the final PDD version 03 dated 19/09/2012. 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 02 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. 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:

<u>Reporting period</u>: From 01/01/2008 to 31/07/2012

For the period from 01/01/2008 to 31/12/2008

Baseline emissions	: 738 625	tonnes of CO ₂ equivalent.
Project emissions	: 99 852	tonnes of CO ₂ equivalent.
Emission Reductions	: 638 773	tonnes of CO ₂ equivalent.



For the period from 01/01/2009	to 31/12/2009	
Baseline emissions	: 814 040 tonnes of CO ₂ equivalent.	
Project emissions	: 107 901 tonnes of CO ₂ equivalent.	
Emission Reductions	: 706 139 tonnes of CO ₂ equivalent.	
For the period from 01/01/2010		
Baseline emissions	: 872 206 tonnes of CO_2 equivalent.	
Project emissions	: 114 659 tonnes of CO_2 equivalent.	
Emission Reductions	: 757 547 tonnes of CO ₂ equivalent.	
For the period from 04/04/2011	1- 24/42/2044	
For the period from 01/01/2011		
Baseline emissions	: 921 366 tonnes of CO ₂ equivalent.	
Project emissions	: 121 253 tonnes of CO_2 equivalent.	
Emission Reductions	: 800 113 tonnes of CO ₂ equivalent.	
For the period from 01/01/2012	to 31/07/2012	
Baseline emissions	: 730 502 tonnes of CO_2 equivalent.	
Project emissions	$: 96\ 876$ tonnes of CO ₂ equivalent.	
Emission Reductions		
	: 633 626 tonnes of CO ₂ equivalent.	
Total for the monitoring period		
Baseline emissions	: 4 076 739 tonnes of CO_2 equivalent.	
Project emissions	: 540 541 tonnes of CO_2 equivalent.	
Emission Reductions	: $3 536 198$ tonnes of CO ₂ equivalent.	



VERIFICATION REPORT

5 REFERENCES

Category 1 Documents:

Documents provided by LLC "Energy Technology Company "ENERGOALIANS" that relate directly to the GHG components of the project.

- /1/ PDD "Reduction of natural gas emissions at PJSC "Creamgas", version 03 dated 19/09/2012
- /2/ Monitoring report for JI project "Reduction of natural gas emissions at PJSC "Creamgas" version 01 dated 08/10/2012
- /3/ Monitoring report for JI project for JI project "Reduction of natural gas emissions at PJSC "Creamgas" version 02 dated 08/11/2012
- /4/ ERUs calculation excel file «Annex_A_to_MR_Creamgaz_2008-2012.xls»
- /5/ Letter of Approval #3078/23/7 dated 18/10/2012 issued by State Environmental Investment Agency of Ukraine
- /6/ Letter of Approval #12-1/8652 dated 12/10/2012 issued by Ministry of the Environment of Estonia

Category 2 Documents:

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

- /1/ Photo A general view of GDP #22 from outside
- /2/ Photo General view of equipment for the measurement of natural gas
- /3/ Photo A general view of GDP #22 from the inside
- /4/ Schematic diagram of the GDP #22
- /5/ Photo Ball valve 11s67p
- /6/ Photo Preparing for measuring the amount of leakage of equipment GDP #22
- /7/ Photo Stopwatch
- /8/ Photo prepared for measurement of leakage volume node input valves GDP #22
- /9/ Photo The process of measuring the amount of leakage from the input node fittings GDP #22
- /10/ Photo Minutes measuring natural gas leakage at GDP #22 of 23/08/2012
- /11/ Photo The process of measuring purging capacity after a measurement
- /12/ Photo General view CGDP Blvd. Franko from outside
- /13/ Photo General view CGDP Blvd. Franko from the inside
- /14/ Photo log review CGDP Blvd. Franko
- /15/ Regime Card CGDP Blvd. Franko
- /16/ Photo The process of measuring the amount of leakage from the input node fittings CGDP Blvd. Franko



VERIFICATION REPORT

- /17/ Photo Protocol for measuring natural gas leakage CGDP Blvd. Franko on 23/08/2012
- /18/ Photo General view of House Connection
- /19/ Photo The process of measuring the amount of leakage from the valve assemblies and threaded connection House Connection
- /20/ Photo The process of measuring the amount of leakage nodes fittings and threaded connections
- /21/ Photo Protocol measuring natural gas leakage at the nodes fittings and threaded connections dated 23/08/2011
- /22/ Order № 706 dated 06/12/2012 amending the working group to monitor gas leaks at the equipment distribution networks and their removal within the JI project
- /23/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI project dated 26/12/2011
- /24/ Order № 216 dated 09/04/2004 to establish a working group to monitor gas leaks at the equipment distribution networks and their removal within the JI project
- /25/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI project dated 25/05/2004
- /26/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI project dated 24/12/2004
- /27/ Order # 2 dated 11/01/2005 amending the working group to monitor gas leaks at the equipment distribution networks and eliminate them within the JI projects
- /28/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI projects dated 29/12/2005
- /29/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI projects dated 28/12/2006
- /30/ Order # 25 dated 06/01/2007 amending the working group to monitor gas leaks at the equipment distribution networks and their removal within the JI projects
- /31/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI projects dated 25/12/2007
- /32/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI projects dated 26/12/2008
- /33/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI projects dated 29/12/2009
- /34/ Protocol of the meeting of the Working Group on Reduction of natural gas equipment distribution networks within the JI projects dated 27/12/2010
- /35/ Order #228 dated 21/04/2004 on approval registry GDP/CGDP, gas

gas

Report No: UKRAINE-ver/0778/2012



distribution networks of PJSC



VERIFICATION REPORT

valves

monitoring of objects included in the limits of the project "Reduction of natural gas emissions at PJSC "Creamgas" /36/ Order #215 of 23/04/2004 on the appointment of the personal staff of measuring teams for implementation of the project "Reduction of natural gas at" Creamgas "and training in accordance with the methods of measurement of natural gas leaks /37/ Order #149 of 15/03/2004 on the participation of OJSC "Creamgas" in the implementation of Kyoto Protocol to the Framework Convention of the United Nations Climate Change /38/ Plan monitoring sites included within the scope of the project "Reduction of natural gas on the open joint stock company on gas supplies "Creamgas" /39/ Photo - database records robot project reduction of natural gas equipment distribution networks within the JI projects /40/ Photo - database report "Protocol for measurement of leakage of methane gas fixture, for the period 06/01/2004 /41/ Log bypass routes of gas distribution and inputs (section 22) /42/ The investment program for 2011 /43/ Report on the implementation of the "Investment Program for 2011" /44/ Operating magazine GDP-39 /45/ Protocol of 23/04/2004, the results of measuring the volume of containers for measuring methane leaks /46/ Protocol measuring methane leakage of GDP Dzhankoy str. Lenina 36 dated 27/04/2004 /47/ Protocol measuring methane leakage of GDP Dzhankoy str. Moscow (steam) dated 27/04/2004 /48/ Protocol measuring methane leakage of GDP Dzhankoy str. Sovetskaya 15, dated 13/05/2004 /49/ Protocol measuring methane leakage of GDP Dzhankoy, trans. Factory 7 dated 24/04/2004 /50/ Protocol for measuring methane leaks CGDP Kolchuhino str. Kirova 78 dated 30/04/2004 /51/ Protocol for measuring methane leaks CGDP Kolchuhino str. Jubileina 56 dated 30/04/2004 /52/ Protocol for measuring methane leaks CGDP p. The new measures, st. Lenina 25 dated 06/05/200 /53/ Protocol for measuring methane leaks CGDP Simferopol, str. Crymska 47/5 dated 12/05/2004 /54/ Protocol for measuring methane leaks CGDP Simferopol, str. Luhova 91st dated 29/04/2004 /55/ Protocol for measuring methane leaks CGDP Simferopol, str. Malorechynska / Griboyedova 25 dated 06/05/2004 /56/ Protocol for measuring methane leaks CGDP Simferopol, str. Mramorna 46 dated 29/04/2004 /57/ Protocol for measuring methane leaks CGDP md. Meadow, pos. Chukurcha str. Sheftellylyk 4 dated 29/04/2004 /58/ Kinnoi Armii for measuring methane leaks CGDP Simferopol, str. 1st Cavalry 19 dated 28/04/2004



VERIFIC	CATION REPORT
/59/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Highway 19/1 dated 05/05/2004
/60/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Borodin 2 dated 26/04/2004
/61/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Zhelyabova 37 dated 05/05/2004
/62/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Zaleski 81 dated 26/04/2004
/63/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Kievskaya 137 (Moskoltso) dated 07/05/2004
/64/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Leksina 11 dated 28/04/2004
/65/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Luhova 89 dated 07/05/2004r.
/66/	Protocol for measuring methane leaks CGDP Simferopol, str.
	Nesterova 36 dated 11/05/2004
/67/	Protocol for measuring methane leaks CGDP Simferopol lane.
1	Spartacus 45 dated 11/05/2004
	Protocol measuring methane leaks on gas fixture dated 30/04.2004
	Protocol measuring methane leaks on gas fixture dated 29/04/2004
	Protocol measuring methane leaks on gas fixture dated 27/04/2004
	Protocol measuring methane leaks on gas fixture dated 14/05/2004
	Protocol measuring methane leaks on gas fixture dated 13/05/2004
	Protocol measuring methane leaks on gas fixture dated 06/05/2004
/74/	5 5
	Protocol measuring methane leaks on gas fixture dated 12/05/2004
	Protocol measuring methane leaks on gas fixture dated 11/05/2004
	Protocol measuring methane leaks on gas fixture dated 07/05/2004
	Protocol measuring methane leaks on gas fixture dated 05/05/2004
	Protocol measuring methane leaks on gas fixture dated 26/04/2004
/80/	
/01/	List of measuring instruments (MI), which is in operation and should
/00/	be entrusted in 2012 Contract #04/01/10 from 04 01 2010 to repair and maintenance of
/82/	
/02/	equipment Contract #03/01/11 from 03.01.2011 to repair and maintenance of
/03/	equipment
	equipment

/84/ Contract #04/01/12 from 04.01.2012 to repair and maintenance of equipment

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/ Horobets Zoya Chief Engineer
- /2/ Prudnikova Svetlana Head of production management
- /3/ Gnatko Oksana leading engineer of production management
- /4/ Olonov Igor chief mechanic



VERIFICATION REPORT

- /5/ Chichkanov Alexander Head of operation of computer hardware and software
- /6/ Sergey Lukyanenko Head of the Department of LLC "Energy Technology Company "ENERGOALIANS"
- /7/ Kardash Yuriy Deputy Head of the Department of LLC "Energy Technology Company "ENERGOALIANS"

- 000



VERIFICATION REPORT

APPENDIX A: VERIFICATION PROTOCOL VERIFICATION PROTOCOL

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	rovals 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?	<u>Corrective Action Request (CAR) 01</u> . Please provide the Letter of Approval issued by the DFPs Party Involved. <u>Corrective Action Request (CAR) 02</u> Please specify ITL of the project in the MR.	ОК	ОК
91	Are all the written project approvals by Parties involved unconditional?	See CAR 01 above	ОК	OK
Project imp	lementation			
92	Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	Project is implemented in accordance with the PDD, determination of which is deemed to be final Clarification Request (CL) 01 Please explain, whether performed measurements of natural gas during the monitoring period, and whether there were any circumstances that hindered make meaningful test?	ОК	ОК
93	What is the status of operation of the project during the monitoring period?	Corrective Action Request (CAR) 03 Please correct the length of the monitoring period	ОК	OK
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?	Yes, the monitoring occurs in accordance with the monitoring plan included in the PDD.	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) above,	Yes, all relevant key factors were taken into account, as appropriate.	OK	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	Data sources used for calculating emission reductions or enhancements of net removals are clearly identified, reliable and transparent	ОК	ОК
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?	<u>Corrective Action Request (CAR) 04</u> Please indicate the level of measurement error.	OK	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?	Yes, the calculation of emission reductions based on conservative assumptions and the most plausible scenarios in a transparent manner	ОК	ОК
	o JI SSC projects only – Not applicable			
	o bundled JI SSC projects only – Not applicabl monitoring plan	e		
Applicable of	only if monitoring plan is revised by project par	ticipant – Not applicable		
Data manag				
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	Yes, the implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures.	OK	ОК
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	Corrective Action Request (CAR) 05 Please provide passport and verification certificate confirming the accuracy of the measurements in the monitoring period for gas analyzer Ex-Tec ® HS 660.	OK	ОК



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Corrective Action Request (CAR) 06 Please provide calibration interval for instruments used in the monitoring process.		
		Corrective Action Request (CAR) 07 Please provide the documental evidences of personnel training of the monitoring period.		
		Corrective Action Request (CAR) 08 Please correct the abbreviated name of ERUs		
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidences and records used for the monitoring maintained are 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 project is in accordance with the monitoring plan	ОК	OK
	regarding programmes of activities (additional to sample-based approach only – Not applicable	elements for assessment) – Not applicable		



VERIFICATION REPORT

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant Verification team conclusion response
Corrective Action Request (CAR) 01. Please provide the Letter of Approval issued by the DFPs and specify its numbers and dates in the MR.	90	Letters of Approval issued by the DFP Issue is closed were provided.
Corrective Action Request (CAR) 02 Please specify ITL of the project in the MR.	90	Corresponding information was added to the MR.Issue is closedSee MR version 02
Corrective Action Request (CAR) 03 Please correct the length of the monitoring period	93	Length of crediting period was corrected.Issue is closedSee MR version 02
Corrective Action Request (CAR) 04 Please indicate the level of measurement error.	95 (c)	Uncertainty level measuring equipment Issue is closed indicated. See MR version 02
Corrective Action Request (CAR) 05 Please provide passport and verification certificate confirming the accuracy of the measurements in the monitoring period for gas analyzer Ex-Tec ® HS 660.	101 (b)	Passport was submitted to the verification Issue is closed team.
Corrective Action Request (CAR) 06 Please provide calibration interval for instruments used in the monitoring process	101 (b)	Calibration interval is provided.Issue is closedSee MR version 02



VERIFICATION REPORT			B U R E A U V E R I T A S
Corrective Action Request (CAR) 07 Please provide the documental evidences of personnel training of the monitoring period.	101 (b)	In the PDD submitted additional information: Special training for work with new equipment is not needed. All trainings concerning the project were held by the equipment suppliers and their cost is included into the cost of equipment. See MR version 02	Issue is closed
Corrective Action Request (CAR) 08 Please correct the abbreviated name of ERUs	101 (b)	Corrected. See MR version 02	Issue is closed
Clarification Request (CL) 01 Please explain, whether performed measurements of natural gas during the monitoring period, and whether there were any circumstances that hindered make meaningful test?	92	Added clarification: Current repair of gas equipment according to the Monitoring Plan, given in PDD, version 03, is carried out once per year, and maintenance is performed once per half-year.	Issue is closed