



VERIFICATION REPORT VEMA S.A

VERIFICATION OF THE JI PROJECT

«REDUCTION OF DIRECT METHANE EMISSIONS BY
IMPLEMENTATION OF INNOVATIVE REPAIR METHODS AT
TECHNOLOGICAL EQUIPMENT OF PUBLIC JOINT STOCK
COMPANY «NATIONAL JOINT STOCK COMPANY
«CHORNOMORNAFTOGAZ»

First periodic

for the period 01/01/2008 – 31/12/2010

REPORT No. UKRAINE-VER/0792/2012

REVISION No. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

Date of first issue: 05/11/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: VEMA S.A.	Client ref.: Fabian Knodel

Summary:

Bureau Veritas Certification has made the first periodic verification for the period from January 1, 2008 to December 31, 2010 of the "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» project of VEMA S.A., located in the Autonomous Republic of Crimea and the Black Sea shelf and the Azov Sea shelf, Ukraine, and applying JI specific approach, 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 (but for the crediting period) 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 monitoring report against project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures. The first output of the verification process is a list of Clarification, 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 planned and described in approved project design documents. Installed equipment that is 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 without material errors and the ERUs issued totalize 3 165 060 tonnes of CO₂ equivalent for the monitoring period from 01/01/2008 to 31/12/2010. Our opinion relates to the project's GHG emissions and resulting GHG emission reductions reported and related to the approved project baseline and monitoring plan, and its associated documents.

Report No.: UKRAINE-ver/0792/2012	Subject Group: JI
Project title: Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz»	
Work carried out by: Oleg Skoblyk – Team Leader, Climate Change Lead Verifier Vladimir Kulish – Team Member, Climate Change Lead Verifier Denys Pishchalov – financial specialist	
Work reviewed by: Ivan Sokolov - Internal Technical Reviewer Vasiliy Kobzar – Technical expert	
Work approved by: Ivan Sokolov – Operational Manager	
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1 INTRODUCTION

VEMA S.A. has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» (hereafter called “the project”) located in the Autonomous Republic of Crimea and the Black Sea shelf and the Azov Sea shelf, 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 January 1, 2008 to December 31, 2010.

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, and 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 determination team consists of the following personnel:

Oleg Skoblyk

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Vladimir Kulish

Bureau Veritas Certification Team Member, Climate Change Lead Verifier

Denys Pishchalov

Bureau Veritas Certification Team Member, Financial specialist

This determination report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification, Internal Technical Reviewer

Vasiliy Kobzar

Bureau Veritas Certification, Technical expert

2 METHODOLOGY

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

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

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

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



2.1 Review of Documents

The Monitoring Report (MR) submitted by VEMA S.A. and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), Approved CDM methodology, Determination Report of the project issued by Bureau Veritas Certification Holding SAS No. UKRAINE-det/0697/2012 as of 26/09/2012, Guidance on criteria for baseline setting and monitoring, Host party criteria, the 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 for the period from 01/01/2008 to 31/12/2010 version 01 of November 01, 2012 and version 02 of November 07, 2012 and the project as described in the determined PDD.

2.2 Follow-up Interviews

On 07/11/2012 Bureau Veritas Certification verification team conducted a visit to the project site (NJSC «Chornomornaftogaz») and performed (on-site) interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of VEMA S.A. and NJSC «Chornomornaftogaz» were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
NJSC «Chornomornaftogaz»	<ul style="list-style-type: none"> ➤ Organizational structure ➤ Responsibilities and authorities ➤ Roles and responsibilities relating to data collection and processing ➤ Equipment installation ➤ Data logging archiving and reporting ➤ Metering equipment control ➤ Metering record keeping system, database ➤ IT management ➤ Personnel training ➤ Quality control procedures and technology ➤ Internal audit and inspections
Consultant: VEMA S.A.	<ul style="list-style-type: none"> ➤ Baseline methodology ➤ Monitoring plan ➤ Monitoring report ➤ Deviations from the 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 Verification Team to assess compliance with the monitoring plan
- (c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

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

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

3 VERIFICATION CONCLUSIONS

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in



the Verification Protocol in Appendix A. The verification of the Project resulted in 8 Corrective Action Requests and 3 Clarification Requests.

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

3.1 Remaining issues and FARs from previous verifications

The purpose of this verification is to verify the issues from previous verifications and determination or issues to be verified in the PDD. The Determination Report prepared by Bureau Veritas Certification has determined the following unsolved issues:

CAR 11:

The Letters of Approval from parties involved are absent.

Response

The project was approved by the State Environmental Investment Agency of Ukraine (Letter of Approval No. 3000/23/7 dated 11/10/2012) and the Federal Office for the Environment of Switzerland (Letter of Approval No. J294-0485 dated 24/10/2012).

3.2 Project approval by Parties involved (90-91)

The project was approved by the host Party (Ukraine) - the Letter of Approval No. 3000/23/7 dated 11/10/2012 issued by the State Environmental Investment Agency of Ukraine. The project was also approved by the party – buyer of the emission reduction units (Switzerland) - Letter of Approval No. J294-0485 dated 24/10/2012 issued by the Federal Office for the Environment FOEN of Switzerland.

The abovementioned written approvals are unconditional.

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

3.3 Project implementation (92-93)

The purpose of the project entitled "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company "National Joint Stock Company "Chornomornaftogaz" (NJSC "Chornomornaftogaz") is reduction of direct methane emissions by implementation of innovative



gas pipeline repair methods of the natural gas production, storage, preparation and transportation system.

Due to introduction of innovative methods of gas pipeline repair, the need to stop the operation of the pipeline and the gas discharging to the atmosphere prior to the repair eliminates. The base is introduction of innovative repair methods that allow repair of gas pipelines with identified defects by using of detachable sleeves and rings between the gas pipeline, which is under repair and the sleeve and the further introduction of a special high-pressure self-hardening composition (sealant) in the space formed between the outer pipeline surface and inner surface of the sleeve.

Starting date of the project is 14/05/2004, when NJSC "Chornomornaftogaz" started implementation of the project activities on introduction of innovative methods of gas pipeline repair with identified defects. But, number of gas pipeline repair in 2004 was not significant so the starting date of lifetime of the project is 01/01/2005.

This Monitoring Report presents emission reductions achieved during the period of 01/01/2008 – 31/12/2010. Status of the project activity implementation complies with the project plan included in the determined PDD version 02.

Table 2 Status of project implementation in the period from 01/01/2008 to 31/12/2010

Gas pipeline NJSC "Chornomornaftogaz"			
Name of gas pipeline	Number of repairs		
	2008	2009	2010
MG Krasnoperekopsk Dzhankoy -	3	2	1
MG Kherson - Crimea	0	1	2
MG Krasnoperekopsk Glebovka -	25	26	28

The starting date of the crediting period has not changed and remains the date when the first emission reductions are expected to be generated, namely: January 1, 2005.

The monitoring system is in place.



Monitoring equipment, such as x-ray machine "Arina-02" and complex gas meter Flowtech-TM, meets industry standards of Ukraine. All monitoring equipment is included in the detailed verification (calibration) plan and tested at intervals prescribed by the manufacturers of such equipment.

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 02, CAR 03, CL 01).

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

The monitoring occurred 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.

For calculating the emission reductions, key factors such as inner diameter of a particular gas pipeline section, length of a particular gas pipeline section, average natural gas pressure of a particular gas pipeline section, natural gas compressibility factor depends on its temperature and pressure, correction factor for a gas pipeline purging, methane concentration (CH₄) in 1m³ of natural gas, methane Global warming potential, average natural gas temperature of a particular gas pipeline section i, that would be isolated and discharged from gas and factors influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions 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 monitoring periods per component of the project are clearly specified in the monitoring report and do not overlap with those for which verifications were already deemed final in the past.

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 - CAR 06).



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 provided in the PDD, including the quality control and quality assurance procedures.

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

According to the current Law "On metrology and metrological activity", all metering equipment in Ukraine shall meet the specified requirements of relevant standards and is subject to periodic calibration. Intercalibration periods are stated in Section B.1. of the MR.

The project complies with the legislative requirements relating to calibration and verification.

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

Co-ordination of work of all departments and services of NJSC "Chornomornaftogaz" relating to the JI project is carried out by a Working Team (protocol #1 meeting of the Working Team on JI "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company "National Joint Stock Company "Chornomornaftogaz" from 07/12/2005).

Operational structure and management structure, which is used to implement the project will be integrated into the data collection according to the practice, established the company that allows you to collect raw data, consolidate and cross-check, without involving any additional measures and changes in current practice.

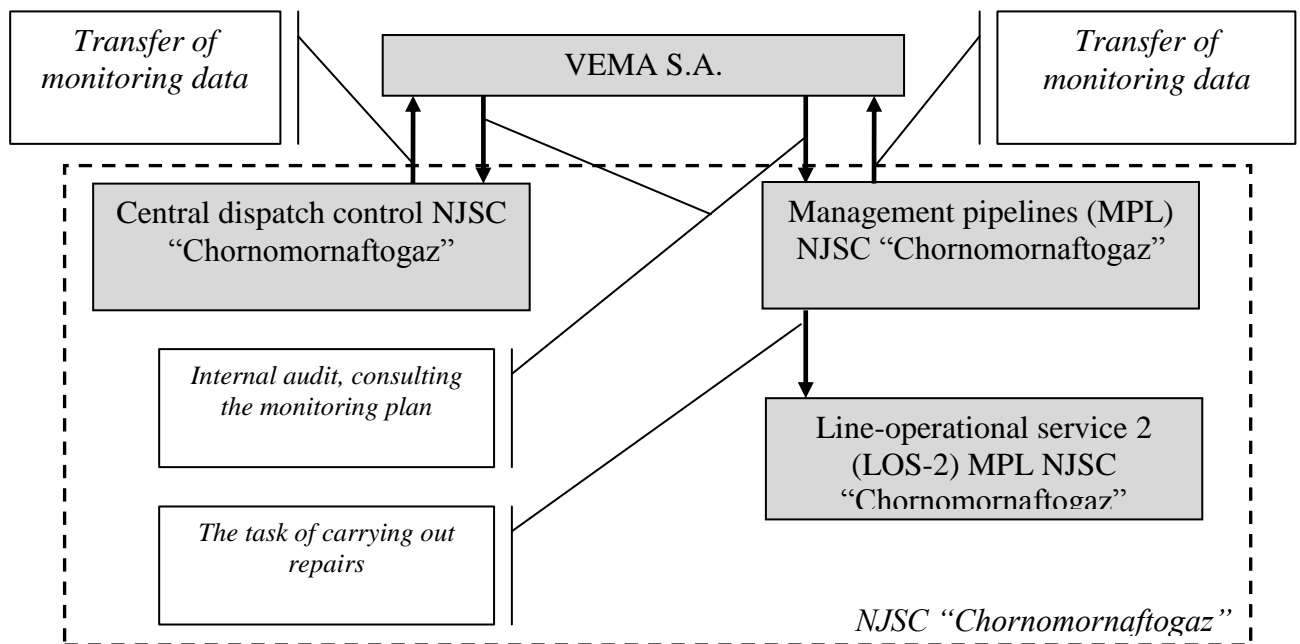


Figure 1 The operational and management structure of JIP

All necessary data concerning GHG emission reduction monitoring is archived in paper and/or electronic form and kept till the end of the crediting period and for two years after the latest transaction with emission reduction units.

The Monitoring Report version 02 provides sufficient information on duties assigned, responsibility and authorities concerning implementation and undertaking of monitoring procedures, including data management. The verification team confirms the efficiency of the existing management and operational systems and considers them appropriate for reliable project monitoring.

The identified areas of concern as to the data management, project participants responses and Bureau Veritas Certification's conclusions are described in Appendix A to this report (refer to CAR 07, CAR 08, CL 02, CL 03).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the first periodic verification for the period from January 1, 2008 to December 31, 2010 of the "Reduction of direct methane emissions by implementation of innovative



repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» 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.

NJSC «Chornomornaftogaz» management is responsible for the preparation of data which serve as the basis for estimation of GHG emission reductions. VEMA S.A provides NJSC «Chornomornaftogaz» with consultative support in the issues relating to organization of data collection and is responsible for developing the monitoring report based on the Project Monitoring Plan included in the final PDD version 02.

Bureau Veritas Certification verified the Project Monitoring Report version 02 for the reporting period from 01/01/2008 to 31/12/2010 as indicated below. Bureau Veritas Certification confirms that the project is implemented as per approved PDD version. 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.

Emission reductions achieved by the project for the period from 01/01/2008 to 31/12/2010 do not differ from the amount predicted for the same period in the determined PDD. This is explained by the fact that at the time of the PDD development all data were available for accurate calculation of GHG emission reductions of the project.

Bureau Veritas Certification can confirm that the GHG emission reduction is calculated without material 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 the following statement:

Reporting period: From 01/01/2008 to 31/12/2010

In the period from 01/01/2008 to 31/12/2008
Baseline emissions : 1 021 464 tonnes of CO2 equivalent.



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Project emissions : 0 tonnes of CO2 equivalent.
Emission Reductions : 1 021 464 tonnes of CO2 equivalent.

In the period from 01/01/2009 to 31/12/2009

Baseline emissions : 1 006 408 tonnes of CO2 equivalent.
Project emissions : 0 tonnes of CO2 equivalent.
Emission Reductions : 1 006 408 tonnes of CO2 equivalent.

In the period from 01/01/2010 to 31/12/2010

Baseline emissions : 1 137 188 tonnes of CO2 equivalent.
Project emissions : 0 tonnes of CO2 equivalent.
Emission Reductions : 1 137 188 tonnes of CO2 equivalent.

Total in the period from 01/01/2008 to 31/12/2010

Baseline emissions : 3 165 060 tonnes of CO2 equivalent.
Project emissions : 0 tonnes of CO2 equivalent.
Emission Reductions : 3 165 060 tonnes of CO2 equivalent.



5 REFERENCES

Category 1 Documents:

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

/1/	Monitoring Report of the JI project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» for the period from 01/01/2008 to 31/12/2010 version 01 dated 01/11/2012
/2/	Monitoring Report of the JI project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» for the period from 01/01/2008 to 31/12/2010 version 02 dated 07/11/2012
/3/	Annex 1. Calculation of GHG emission reductions under the project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz»
/4/	Project Design Document of the project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz», version 02 dated 21/09/2012
/5/	Determination Report of the project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» No. UKRAINE-det/0697/2012 as of 26/09/2012 issued by Bureau Veritas Certification
/6/	Letter of Approval of the Joint Implementation project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» # 3000/23/7 of 11/10/2012 issued by State Environmental Investment Agency of Ukraine
/7/	Letter of Approval of the JI project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company «National Joint Stock Company «Chornomornaftogaz» # J294-0485 issued by the Federal Office for the Environment of Switzerland dated 24/10/2012



Category 2 Documents:

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

/1/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG-Krasnoperekopsk Dzhankoy Picket 390 - Picket 540 (2008).
/2/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG-Krasnoperekopsk Dzhankoy Picket 40 - Picket 185 (2009).
/3/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG-Krasnoperekopsk Dzhankoy Picket 185 - Picket 390 (2010).
/4/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG Kherson - Crimea picket 720 - GDS (2009).
/5/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG Kherson - Crimea picket 720 - GDS (2010).
/6/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG-Krasnoperekopsk Glebovka picket 310 - picket 770 (2008).
/7/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG-Krasnoperekopsk Glebovka picket 770 - picket 970 (2008).
/8/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG-Krasnoperekopsk Glebovka picket 770 - picket 970 (2009).
/9/	Technical act on installation of composite reinforcing bands PPS using innovative sealant based on rapidly solidified material MG-Krasnoperekopsk Glebovka picket 310 - picket 770 (2010).
/10/	Technical report on screening diagnostic of pipeline MG-Krasnoperekopsk Dzhankoy, MG Kherson – Crimea, MG-Krasnoperekopsk Glebovka with x-ray machine (2008).
/11/	Certificate on calibration of measurement tools (2008).
/12/	Calibration schedule of measurement tools (2008).
/13/	Certificate on calibration of measurement tools (2009).
/14/	Calibration schedule of measurement tools (2009).
/15/	Certificate on calibration of measurement tools (2010).
/16/	Calibration schedule of measurement tools (2010).



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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.

	Name	Organization	Position
/1/	A.Lavreka	NJSC "Chornomornaftogaz"	Head of pipeline management
/2/	O. Ochkan	NJSC "Chornomornaftogaz"	Head of production and technical service of pipeline management
/3/	N.Djelilov	NJSC "Chornomornaftogaz"	Head of line-operational service of pipeline management
/4/	K.Sereda	NJSC "Chornomornaftogaz"	Head of production and technical management department
/5/	D. Palamarchyk	LLC «CEP»	Consultant of VEMA S.A.



APPENDIX A: PROJECT VERIFICATION PROTOCOL

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VERIFICATION PROTOCOL

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project approvals 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 (Switzerland). The Letters of Approval were issued by NFPs of the Parties involved. Two Letters of Approval were available at the beginning of the first verification of the project. CAR 01. Please, provide detailed information on the Letters of Approval issued by the parties involved in the monitoring report.	CAR 01	OK
91	Are all the written project approvals by Parties involved unconditional?	Yes, all the written project approvals by Parties involved are unconditional.	OK	OK
Project implementation				
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	Yes, the project has been implemented in accordance with the PDD, which is listed on the UNFCCC JI website. CAR 02. The beginning date of the monitoring period	CAR 02 CAR 03 CL 01	OK OK OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	UNFCCC JI website?	is incorrect in Section A.4. of the MR. CAR 03. Provide the Schedule of gas pipeline repairs of NJSC "Chornomornaftogaz" in Section A.6. of the MR. CL 01. Please, provide a reference to JI Guidance on criteria for baseline setting and monitoring, Version 03.		
93	What is the status of operation of the project during the monitoring period?	Starting date of the project is 14/05/2004, when NJSC "Chornomornaftogaz" started implementation of the project activities on introduction of innovative methods of gas pipeline repair with identified defects. But, number of gas pipeline repair in 2004 was not significant so the starting date of lifetime of the project is 01/01/2005. The Project has been operational for the whole monitoring period, which is 01/01/2008-31/12/2010.	OK	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?	There aren't any changes in or deviations from the registered PDD.	OK	OK
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	Yes, all relevant key factors were taken into account, as appropriate.	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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. CAR 04. The names of the Annexes to the MR stated in the MR differ from the ones stated in the Annexes themselves. CAR 05. In Table 3 and 4 Section B.2.2. Provide information on sources of data for the monitoring parameters. CAR 06. Please, check description of indexes after formulae. Make the appropriate corrections.	CAR 04 CAR 05 CAR 06	OK OK OK
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	Yes, emission factors, including default emission factors, that are used for calculating the emission reductions or enhancements of net removals, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.	OK	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	Calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.	OK	OK
Applicable to JI SSC projects only				
96	Is the relevant threshold to be classified	Not applicable	Not	Not



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	as JI SSC project not exceeded during the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?		applicable	applicable
Applicable to bundled JI SSC projects only				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	Not applicable	Not applicable	Not applicable
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	Not applicable	Not applicable	Not applicable
98	If the monitoring is based on a monitoring plan that provides for overlapping monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring report? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	Not applicable	Not applicable	Not applicable
Revision of monitoring plan				
Applicable only if monitoring plan is revised by project participant				



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	Not applicable.	Not applicable	Not applicable
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?	Not applicable	Not applicable	Not applicable
Data management				
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, including the quality control and quality assurance procedures, is in accordance with the monitoring plan. CAR 07. Please, provide information on storage of monitoring data of the project. CAR 08. Monitoring period is incorrect in Section B.4.	CAR 07 CAR 08	OK OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	Yes, the function of the monitoring equipment, including its calibration status is in order. CL 02. Please, provide calibration certificates of metering devices used under the project. CL 03. Please, provide a reference to standards of Ukraine DSTU 4088-2001 and DSTU 3386-96.	CL 02 CL 03	OK OK
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.	OK	OK
101 (d)	Is the data collection and management	The data collection and management system for the	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	system for the project in accordance with the monitoring plan?	project is in accordance with the monitoring plan. The verification team confirms the effectiveness of the existing management and operating systems and considers them suitable for reliable monitoring of the project.		
Verification regarding programs of activities (additional elements for assessment)				
102	Is any JPA that has not been added to the JI PoA not verified?	Not applicable	Not applicable	Not applicable
103	Is the verification based on the monitoring reports of all JPAs to be verified?	Not applicable	Not applicable	Not applicable
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	Not applicable	Not applicable	Not applicable
104	Does the monitoring period not overlap with previous monitoring periods?	Not applicable	Not applicable	Not applicable
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	Not applicable	Not applicable	Not applicable
Applicable to sample-based approach only				



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
106	<p>Does the sampling plan prepared by the AIE:</p> <p>(a) Describe its sample selection, taking into account that:</p> <p>(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:</p> <ul style="list-style-type: none"> - The types of JPAs; - The complexity of the applicable technologies and/or measures used; - The geographical location of each JPA; - The amounts of expected emission reductions of the JPAs being verified; - The number of JPAs for which emission reductions are being verified; - The length of monitoring periods of the JPAs being verified; and - The samples selected for prior verifications, if any? 	Not applicable	Not applicable	Not applicable



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	Not applicable	Not applicable	Not applicable
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?	Not applicable	Not applicable	Not applicable
109	Is the sampling plan available for submission to the secretariat for the JISC's ex ante assessment? (Optional)	Not applicable	Not applicable	Not applicable
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?	Not applicable	Not applicable	Not applicable



VERIFICATION REPORT

Table 2. Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR 01. Please, provide detailed information on the Letters of Approval issued by the parties involved in the monitoring report.	90	The project obtained approval from Ukraine (Letter of Approval #3000/23/7 dated 11/10/2012, issued by the State Environmental Investment Agency of Ukraine). The project was also approved by the Federal Office for the Environment (FOEN) of Switzerland (Letter of Approval No. J294-0485 dated 24/10/2012).	CAR 01 is closed as necessary corrections were made in the MR version 02.
CAR 02. The beginning date of the monitoring period is incorrect in Section A.4. of the MR.	90	Date of commencement of the monitoring period: 01/01/2008	CAR 02 is closed as necessary corrections were made in the MR version 02.
CAR 03. Provide the Schedule of gas pipeline repairs of NJSC "Chornomornaftogaz" in Section A.6. of the MR.	95(b)	Necessary corrections were made.	CAR 03 is closed as necessary corrections were made.
CAR 04. The names of the Annexes to the MR stated in the MR differ from the ones stated in the Annexes themselves.	95(b)	Annex 1: Calculation of GHG emission reductions	CAR 04 is closed as necessary corrections were made.



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CAR 05. In Table 3 and 4 Section B.2.2. Provide information on sources of data for the monitoring parameters.	95 (b)	Necessary information was provided.	CAR 05 is closed as necessary corrections were made.
CAR 06. Please, check description of indexes after formulae. Make the appropriate corrections.	101 (b)	Indexes descriptions were checked. Necessary corrections were made.	CAR 06 is closed as necessary corrections were made.
CAR 07. Please, provide information on storage of monitoring data of the project.	101 (a)	All data on the project "Reduction of direct methane emissions by implementation of innovative repair methods at technological equipment of Public Joint Stock Company "National Joint Stock Company "Chornomornaftogaz" will be stored at PJSC " Chornomornaftogaz " throughout the crediting period and at least for two years since the last transfer of ERUs in the project.	CAR 07 is closed as necessary corrections were made.
CAR 08. Monitoring period is incorrect in Section B.4.	101 (a)	from 01/01/2008 to 31/12/2010	CAR 08 is closed as necessary corrections were made.
CL 01. Please, provide a reference to JI Guidance on criteria for baseline setting and monitoring, Version 03.	95 (b)	Necessary reference was provided	CL 01 was closed as necessary reference was provided.
CL 02. Please, provide calibration certificates of metering devises used under the project.	95 (b)	Necessary acts were provided	CL 02 is closed as necessary information was provided.
CL 03. Please, provide a reference to standards of Ukraine DSTU 4088-2001 and DSTU 3386-96.	101 (d)	Necessary reference was provided	CL 03 is closed as necessary reference was provided.

