DETERMINATION REPORT
VEMA S.A.

DETERMINATION OF THE REDUCTION OF METHANE EMISSIONS ON THE GAS EQUIPMENT OF GAS-DISTRIBUTING POINTS AND ON THE GAS ARMATURE OF GAS-DISTRIBUTING NETWORKS OF CJSC "THEODOSIA"

REPORT NO. UKRAINE-DET/0324/2011

REVISION NO. 02

BUREAU VERITAS CERTIFICATION

BUREAU VERITAS CERTIFICATION

Report No: UKRAINE-det/0324/2011

DETERMINATION REPORT

Date of first issue:	Organizational unit:
06/08/2011	Bureau Veritas Certification Holding SAS
Client: Vema S.A.	**Client ref.:** Fabian Knodel

Summary:

Bureau Veritas Certification has made the determination of the "Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia"" project of Vema S.A. located in Feodosiya town, settlements of city type Prymorskyy, Koktebel, Shchebetivka, Ordzhonikidze, villages Nasypne, Blyzhnye, Sonyachne, Krasnokamyanka, Pidgirne, Yuzhne, Stepne, Beregove, Autonomous Republic of Crimea, Ukraine 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 determination scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, 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 determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the determination process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies Guidance on criteria for baseline setting and monitoring and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report No.:	Subject Group:
UKRAINE-det/0324/2011	JI

Project title:

"Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia""

Work carried out by:

Oleg Skoblyk – Team Leader, Lead Verifier

Kateryna Zinevych – Team member, Lead Verifier

Alexey Kulakov – Team Member, Specialist

Work reviewed by:

Ivan Sokolov – Internal Technical Reviewer

Elena Mazilova – Specialist

Work approved by:

Flavio Gomes – Operational Manager

Bureau Veritas Certification Holding SAS

Date of this revision:	Rev. No.:	Number of pages:
09/08/2011	02	64

Indexing terms

☒ No distribution without permission from the Client or responsible organizational unit

☐ Limited distribution

☐ Unrestricted distribution

Table of Contents *Page*

1 INTRODUCTION

Vema S.A. has commissioned Bureau Veritas Certification to determine its JI project “Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC “Theodosia”” (hereafter called “the project”) at the city of Feodosiya town, settlements of city type Prymorskyy, Koktebel, Shchebetivka, Ordzhonikidze, villages Nasypne, Blyzhnye, Sonyachne, Krasnokamyanka, Pidgirne, Yuzhne, Stepne, Beregove, Autonomous Republic of Crimea, Ukraine.

This report summarizes the findings of the determination 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

The determination serves as project design verification and is a requirement of all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project’s compliance with relevant UNFCCC and host country criteria are determined in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emissions reductions units (ERUs).

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

The determination is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

1.3 Determination team

The determination team consists of the following personnel:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Verifier

Kateryna Zinevych

Bureau Veritas Certification Team Member, Climate Change Lead Verifier

Alexey Kulakov

Bureau Veritas Certification Team Member, Climate Change Specialist

This determination report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification, Internal Technical Reviewer

Elena Mazlova

Bureau Veritas Certification Team Member, Climate Change Specialist

2 METHODOLOGY

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

In order to ensure transparency, a determination 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 determination and the results from determining the identified criteria. The determination protocol serves the following purposes:

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

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

2.1 Review of Documents

The Project Design Document (PDD) submitted by Vema S.A. and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint

implementation project design document form, Approved CDM methodology and/or Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, Vema S.A. revised the PDD and resubmitted it on 02/08/2011.

The determination findings presented in this report relate to the project as described in the PDD versions 01, 02 and 03, 04, 05.

2.2 Follow-up Interviews

On 28/07/2011 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of CJSC "Theodosia" and Vema S.A. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
CJSC "Theodosia", Vema S.A.	➢ Additionality of the project, ➢ Emission factor of the project, ➢ EIA and its approval, ➢ Project design, ➢ Consulting process for stakeholder's comments , ➢ Approval status by the host country, ➢ Applicability of methodology, ➢ Monitoring Plan, ➢ QA issues, ➢ Baseline calculations.

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination 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 project design.

Corrective Action Request (CAR) is issued, where:

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;

(b) The JI requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

The determination team may also issue Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable JI requirements have been met.

The determination team may also issue Forward Action Request (FAR), informing the project participants of an issue that needs to be reviewed during the verification.

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

3 PROJECT DESCRIPTION

The purpose of the project is reduction of the natural gas emissions at gas-transport and gas-distributing infrastructure of CJSC “Theodosia”, which are the result of leakage from gas equipment and gas armature. The basic sources of emissions, included into the project scope are:

- gas equipment (reducing gears, valves, filters, turning off devices and others like that), flanged and screw-thread connections which are in gas-distributing points (GDP) and closet gas-distributing points (CGDP) CJSC “Theodosia”;

- gas armature (faucets, bolts, valves and others like that), screw-thread and flanged connections located on gas pipelines CJSC “Theodosia”.

General quantity of GDP included into the boundary of the project is 2 units, CGDP – 138 units, number of gas armature on gas pipelines is 424 units.

Main reason of natural gas emissions is death of sealing elements of equipment as a result of action of temperature vibrations and moisture. Basic component of natural gas, methane (92 - 95%), is greenhouse gas. Removal of sources of natural gas will result in reductions of emission of greenhouse gases. In future, for determination of sources of natural gas emissions «emissions of methane» is used, as instrumental measuring of emissions refer to methane directly.

CJSC “Theodosia” is an enterprise that provides transporting and supply of natural gas for industrial (271 enterprises), public-service (65 economies) users and population (23 034 apartments and individual estate owners) in Feodosiya town and settlements of city type and villages of Feodosiya area (settlements of city type Prymorskyy, Koktebel, Shchebetivka, Ordzhonikidze, villages Nasypne, Blyzhnye, Sonyachne, Krasnokamyanka, Pidgirne, Yuzhne, Stepne, Beregove), Autonomous Republic of Crimea, Ukraine.

The structure of existent tariffs for transporting of gas, which are regulated by the state, does not take into account the depreciation and investment necessities of gas-distributing enterprises. It results in the shortage of finances for repair works and modernization of gas networks, purchase of the proper technological equipment and component parts, and, as a result, influences on the increase of natural gas emissions at CJSC “Theodosia” facilities.

Before the beginning of this project realization application of Joint Implementation mechanism was foreseen, stipulated by Kyoto Protocol. January, 2005 a Preliminary investment contract was signed in relation to the t JI project between company VEMA S.A. (Switzerland) and CJSC “Theodosia”.

Project measures consist of reduction of methane emissions that occur in the gas equipment of GDP (CGDP) and gas armature of gas pipelines of CJSC “Theodosia”.

Within the framework of JI project with the aim of elimination of methane emissions on gas equipment and on the gas armature there are three types of repairs used:

1. Complete substitution of out-of-date and morally threadbare gas equipment and gas armature by new units.
2. Repair of gas equipment components and gas armature;
3. Replacement of pressure-sealing elements with the use of modern sealing materials, changing practice of service and repair, that has become common, on the basis of paronite gaskets, and also sealing stuffing of cotton fibres with fatty impregnation and asbestos-graphite filler.

The existent practice of service and repair that has become common, on the basis of paronite gaskets, and also the sealing stuffing of cotton fibres with fatty impregnation and asbestos-graphite filler does not give long-lasting effect of methane emissions reduction. As a result of activities due to JI project in addition to methane emissions reduction there will be natural gas technical losses reduced and contribution to ecological situation improvement, the risk of emergency and explosive situations will be reduced.

Project activities include:

- Introduction of Purposeful Examination and Technical Maintenance (PETM) of gas equipment of GDP (CGDP) and gas armature, flanged and threaded joints - modern and most economically-effective practice, that allows not only to find out the places of emissions but also to determine their volumes (i. e. potential volume of reduction of gas losses). This key information is necessary for grounding of efficiency of repairs and priority choice of its objects, which is important at the insufficient financing for

the removal of all emissions. This activity will include purchase and calibration of modern measuring equipment, corresponding studies of workers, monitoring of every gas equipment and gas armature, flanged and threaded connection, creation of the system of collection and storage of methane sources and also input of internal audit and system for providing of removal quality and account of methane emissions volumes.

- Exposure and methane emissions measuring: monitoring system of emissions on all gas equipment of GDP (CGDP), on gas armature (bolts, faucets, valves), on flanged and threaded connections, including the removed methane emissions (repaired components of equipment). Monitoring will be performed on regular basis by the specially taught personnel. The found out emissions will be properly marked by individual numbers, the volumes of methane emissions will be measured and registered in a database.
- Removal of found out emissions: repairs of gas equipment of GDP (CGDP) and gas armature on gas pipelines with emissions within the framework of this project will be varied from replacement of sealing elements or pressure-sealing, to major repairs and replacement of gas equipment and gas armature by a new, modern equipment. The repaired components of gas equipment GDP (CGDP) and gas armature of gas pipelines will be inspected regularly, as component part of standard monitoring activity, to ascertain, that they did not become the source of emissions again.

The project was initiated in January 2005:

In January 2005 there was inspection of gas equipment of GDP (CGDP) and gas armature, flanged and threaded joints of gas pipelines CJSC “Theodosia” performed and primary measuring of emissions done, the results of which made the basis for setting the project baseline.

A Preliminary investment contract was signed on January, 18, 2005 in relation to JI project between company VEMA S.A. (Switzerland) and CJSC “Theodosia”. It was also foreseen by the contract, that company VEMA S.A. develops the monitoring program of emissions and JI Project Design Documentation (PDD).

On January 22, 2005 - the Working group was organized with the basic tasks of provision of JI project implementation.

On February 07, 2005 by the participants of project PDD was approved (version 01), which included the program of emissions monitoring.

February 2005 - beginning inspection and repair works of gas equipment GDP (CGDP) and gas armature, flanged and threaded joints of gas-distributing networks of CJSC “Theodosia”.

Durations of project is unlimited, as PETM program, monitoring and emissions removal program were aimed at becoming a component part of CJSC “Theodosia” day by day work. Reduction of CO2-equ emissions is confirmed for the period of 18 years in accordance with modality and procedures of JI Mechanism.

4 DETERMINATION CONCLUSIONS

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

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

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A. The determination of the Project resulted in 10 Corrective Action Requests and 1 Clarification Request.

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

4.1 Project approvals by Parties involved (19-20)

A letter of approval has not been received yet, which is described in the CAR 4 in the Determination protocol below.
But the project is already supported by the Ukrainian NFP, namely by State Environmental Investment Agency of Ukraine, which has issued a Letter of Endorsement for the JI Project № 1778/23/7 of 08.07.2011.
On receipt of Determination Report from the Accredited Independent Entity project documentation will be presented to the State Environmental Investment Agency of Ukraine for the receipt of the Letter of Approval. Second Letter of Approval will be received from the other project participant party.

Outstanding issues (CAR 01, CAR 02, CAR 04, CL 01) concerning project implementation and project approval are stated in the Appendix A below.

4.2 Authorization of project participants by Parties involved (21)

The participation for each of the legal entities listed as project participants in the PDD will be authorized by a Party involved, which is also listed in the PDD, through a written project approval. A letter of approval has not been received yet, which is described in the CAR 4 in the Determination protocol below.

4.3 Baseline setting (22-26)

The PDD explicitly indicates that using a methodology for baseline setting and monitoring developed in accordance with appendix B of the JI guidelines (hereinafter referred to as JI specific approach) was the selected approach for identifying the baseline. Baseline determination (measurement and calculation of natural gas leaks) has been performed using JI Specific Approach on the basis of the approved baseline methodology AM0023 version 3 «Leak reduction from natural gas pipeline

compressor or gate stations». The modification of methodology AM0023 version 3 connected with application of more exact method of measuring of methane leakages.

The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline is established:

(a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:

a. Keeping the current system for detection and elimination of leaks;
b. Implementation of this Project not as JI project.

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector the AIE hereby confirms that the selected baseline and monitoring methodology based on approved baseline methodology AM0023 version 3 «Leak reduction from natural gas pipeline compressor or gate stations» is applicable to the project activity, which, complies with all the applicability conditions therein.

All explanations, descriptions and analyses pertaining to the baseline in the PDD were found adequate and the baseline is identified appropriately.

Outstanding issues (CAR 05) concerning baseline setting are stated in the Appendix A below.

4.4 Additionality (27-31)

The most recent version of the “Tool for the demonstration and assessment of additionality” approved by the CDM Executive Board was used. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The PDD provides a justification of the applicability of the approach with a clear and transparent description, as per item 4.3 above. Since the “Guidance on Criteria for Baseline Setting and Monitoring (Version 2)” allows PP to use any of the three Options (a,b,c) so in order to prove additionality Option (c) was used.

In order to demonstrate that the project is not a plausible baseline scenario without being registered as a JI project, a three-step process was undertaken:

- *Identification of alternatives*: Only two variants of initial terms can be examined as acceptable to Project.
- *Barrier Analysis*: It is demonstrated that the project faces technological, organisational and financial barriers regarding technology upgrades
- *Common Practice Analysis*: Measures similar to the measures of this particular Project, at current time can be conducted only on condition of receipt of predictable profit from realization of the mechanism set by the article 6 of Kyoto protocol up to UNFCCC.

Additionality is demonstrated appropriately as a result of the analysis using the approach chosen.

Outstanding issues (CAR 06) concerning additionality are stated in the Appendix A below.

4.5 Project boundary (32-33)

The project boundary defined in the PDD, which is only methane emissions sources, encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

(i) Under the control of the project participants: technological methane emissions during plan repair of gas pipeline;

(ii) Reasonably attributable to the project: methane emissions from gas fittings of house distribution networks;

(iii) Significant:
- leaks on gas equipment (reducing gears, valves, filters and others like that) of gas-distributing points (cabinet-type gas-distributing points) and
- leaks on gas armature (faucets, bolts and others like that), threaded and flanged connections that are located on gas-distributing networks of CJSC "Theodosia".

Only methane emissions sources type (iii) are including to the JI project boundary:
- leaks on gas equipment of gas-distributing points (cabinet-type gas-distributing points);

- leaks on gas armature, threaded and flange joints that are located on gas-distributing networks of CJSC "Theodosia".
Complete list of gas-distributing points (2 units), cabinet-type gas-distributing points (138 units) and gas armature (424 units), that are including into the JI project boundary, are set in the Accompanying document 1.

Sources of leaks of type (i) - technological leaks of gas at repair of pipes of gas pipelines - are not included in project boundary as CJSC “Theodosia” does not apply technology which allow not to suppose such leaks.

Sources of leaks of type (ii) - gas leaks in house distributing networks - are not included in the JI project boundary as first, volumes of such leaks it is much less, than volumes of leaks of sources of type (iii), and secondly, sources of these leaks, as a rule, are in private houses (apartments).

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD.

No outstanding issues considering crediting period were issued during the determination process.

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began, and the starting date is 18/01/2005, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 18 years or 215 months.

The PDD states the length of the crediting period in years and months, which is 18 years or 215 months, and its starting date as 07/02/2005, which is on the date the first emission reductions or enhancements of net removals are generated by the project.

The PDD states that the crediting period for the issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project.

The PDD states that the extension of its crediting period beyond 2012 is subject to the host Party approval, and the estimates of emission reductions or enhancements of net removals are presented separately for those until 2012 and those after 2012 in all relevant sections of the PDD.

Outstanding issues (CAR 03) concerning crediting period are stated in the Appendix A below.

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach was selected.

The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions or enhancements of net removals to be monitored such as Potential of global warming, Factor of vagueness of emissions measuring equipment.

The monitoring plan draws on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" developed by the JISC, as appropriate GWP_{CH4}, Ti, $F_{CH4,I}$, $w_{sampleCH4,I}$.

The monitoring plan explicitly and clearly distinguishes:

(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination, such as (not applicable for this project).

(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination, such as (not applicable for this project).

(iii) Data and parameters that are monitored throughout the crediting period, such as (The sequence number of gas equipment GDP (CGDP), gas armature, where methane emissions are found, removed, and then checked; Time; Date; Potential of global warming; Speed of emissions for every found source; Temperature and gas pressure; Factor of vagueness of emissions measuring equipment; Tank capacity; Methane concentration in a sample; Period during which methane concentration in a tank reaches a certain level).

After detection and measuring of methane emissions the monitoring program was worked out for all gas equipment GDP (CGDP), locking-regulating gas armature, flanged and threaded connections of gas pipelines of CJSC “Theodosia”. Implementation of such program is component part of the project activity. Monitoring embraces both emissions from the sources of leakages that appear again and control after the already repaired gas equipment, on which methane emissions were observed before. Within the framework of JI Project a working group of CJSC “Theodosia” the Register of gas-distributing points and gas armature of JI project "Reduction of methane emissions” was drawn for the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC “Theodosia” (see the Supporting document 1), that includes complete information about all GDP (CGDP), locking-regulating gas armature, flanged and threaded connections that enter to the Project boundary. All corresponding data related to the calculation of reduction of methane emissions are kept in an electronic database. Every monitoring report will include all necessary information from this database. The Project data and documents in a paper and/or electronic kind, in accordance with the CJSC “Theodosia” heads orders of 22.01.2005 № 22/01-05 and of 12/05/2011 № 283 are kept till 31.12.2024.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate, such as:

Project emissions

$F^{+}_{CH4,i} = Vbag * w_{sampleCH4,i} * 3600 / \tau_i$, where

$F^{+}_{CH4,i}$ - speed of methane emissions (emission volume) through leaking equipment and after the repair (substitution) (m³/hour.);
Vbag - leakage-proof tank volume for measuring (m³);
$w_{sampleCH4,i}$ - methane concentration in the emission sample, which is the difference of concentrations at the beginning and the end of measuring (%);
τ_i - average duration of filling the tank for emission and up to the determined concentration (seconds).

$$F_{CH_{4,i,P}} = \frac{F^{+}_{CH_{4,i}} \cdot 273 \cdot P}{0{,}1013 \cdot (273+t)}$$, where

$F_{CH_{4,i,P}}$ – speed (volume) of project (after repair, substitution) of methane emission for i- equipment, adjusted to the normal conditions (m^3/hours.);

P – gas pressure in the tank, MPa;
t – temperature of gas in the tank, °C.

Q_{yP} = ConvFactor *Σ[$F_{CH_{4,i,P}}$ * Ti,y * URi]*GWP_{CH4}*0,9 , where

QyP - methane emissions during the period y, for equipment, which was repaired (substituted) (tCO2eq);
ConvFactor - coefficient of transformation m³CH4 in tCH4. Under normal conditions (0 °C and 0.1013 MPa) it equals 0.0007168 tCH4/m³CH4;
URi - coefficient which takes into account the vagueness of measuring method (equals to 95%);
Ti,y - time (in hours) for i-equipment, which functioned during period y (period of monitoring) being repaired (substituted);
GWP_{CH4} - Global Warming Potential for methane (equals to 21 tCO2eq/tCH4);
0,9 - coefficient which takes into account the error of measuring devices.

Baseline Emissions

$\bar{F}_{CH_{4,i}}$ = Vbag * $w_{sampleCH4,\ i}$ * 3600 / τ_i , where

$\bar{F}_{CH_{4,i}}$ speed (volume) of methane emissions through leaking equipment and before repair (m³/hours);
Vbag volume of impermeable tank for measuring (m³);
$w_{sampleCH4,\ i}$ concentration of methane in the sample of emission *i* that is the difference of concentrations at the beginning and at the end of measuring (%);
τ_i average duration of filling to the tank for emissions i before its repair (seconds).

$$F_{CH_{4,i,B}} = \frac{\bar{F}_{CH_{4,i}} \cdot 273 \cdot P}{0{,}1013 \cdot (273 + t)}$$, where

$F_{CH_{4,i,B}}$ is speed (volume) of base methane emission for i - element, corrected to the normal conditions(m3/hours);
P is pressure of gas in a tank, MPa;
t is a gas temperature in a tank, °C.

QyB = ConvFactor *Σ[* Ti, y * of URi]*GWPCH4*0,9 , where

QyB base extrass of methane on gas equipment for the period y (tCO2 equivalents);
ConvFactor coefficient of counting of m³of CH4 in tCH4 at normal terms (0 degrees celsius and 101.3 kPa). It equals 0,0007168 tCH4/m³ CH4;
URi coefficient that takes into account the vagueness of method of measuring;
Ti, y time (in hours) for the equipment of i that functioned during the considered period y (monitoring period) before its repair (replacements);
GWP_{CH4} Potential of Global Warming for methane (21 tCO2eq/equals tCH4);
0,9 coefficient that takes into account the error of measuring devices.

Emission Reductions

ERU = $\sum[Q_{yB} - Q_{yP}]$, where

ERU– Emissions unit reduction, t CO_2;
Q_{yP} – project emissions, t CO_2;
Q_{yB} – base emissions, t CO_2.

The monitoring plan presents the quality assurance and control procedures for the monitoring process, which is properly described in the PDD version 05. This includes, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available on request.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities.

Co-ordination of work of all departments and services of CJSC “Theodosia” is carried out in relation to introduction of JI project by the Working group created by Order of CJSC “Theodosia” General Director of 22.01.2005 No. 22/01-05. The update structure of the Working group was approved by Order of General director №283 of 12.05.2011 and is presented on Fig. 5.

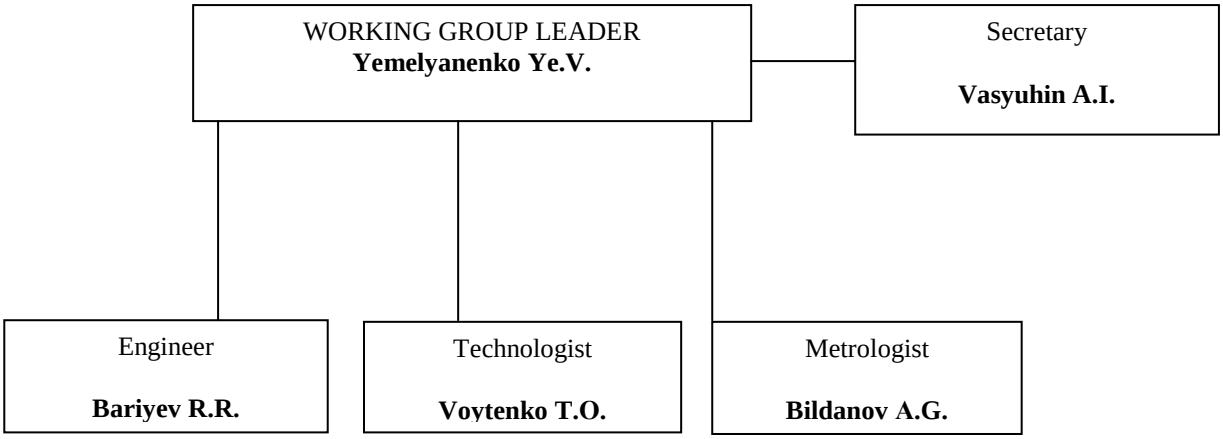

Fig.5. Structure of the Working group.

Voytenko T.O. is responsible for collection of all information provided for by monitoring plan, and for making all necessary calculations. Vsyuhin A.I. is responsible for storage and archiving of all got information as a result of the conducted measuring and calculations. The head of working team (Yemelyanenko Ye.V.) determines plan of measurements under the Project and volume of necessary resources on the basis of received information. Bariyev R.R. is responsible for organization of monitoring measurements of leakages and their removal. Bildanov A.G. provides presence of calibrated measuring equipment and makes technical support.

On the whole, the monitoring report reflects good monitoring practices appropriate to the project type.

The monitoring plan provides, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature etc.) but not including data that are calculated with equations

The monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

Outstanding issues (CAR 07, CAR 08) concerning monitoring plan are stated in the Appendix A below.

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential leakage of the project and appropriately explains which sources of leakage are to

be calculated, and which can be neglected. By the JI Specific Approach chosen leakage is not foreseen.

No outstanding issues considering leakage were issued during the determination process.

4.9 Estimation of emission reductions or enhancements of net removals (42-47)

The PDD indicates assessment of emissions in the baseline scenario and in the project scenario as the approach chosen to estimate the emission reductions or enhancement of net removals generated by the project.

The PDD provides the ex ante estimates of:

(a) Emissions for the project scenario (within the project boundary), which are 12286 tons of CO2eq for 2005 – 2007, 72111 tons of CO2eq for 2008 – 2012 and 160248 tons of CO2eq for 2013-2022;

(b) Leakage, as applicable, which are 0 tons of CO2eq for the before Kyoto, crediting and post Kyoto period;

(c) Emissions for the baseline scenario (within the project boundary), which are 69491 tons of CO2eq for 2005 – 2007, 407882 tons of CO2eq for 2008 – 2012 and 906404 tons of CO2eq for 2013-2022;

(d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are 57205 tons of CO2eq for 2005 – 2007, 335771 tons of CO2eq for 2008 – 2012 and 746156 tons of CO2eq for 2013-2022.

The estimates referred to above are given:

(a) On an annual basis;

(b) From 07/02/2005 to 31/12/2022, covering the whole crediting period;

(c) On a source-by-source basis;

(d) For each GHG gas, which in this case is CH4

(e) In tonnes of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol;

The formula used for calculating the estimates referred above, which are clearly described in the section 4.7 of this report, are consistent throughout the PDD.

For calculating the estimates referred to above, key factors, e.g. (amount of natural gas leakage to the atmosphere) influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above, such as (measurement reports) are clearly identified, reliable and transparent.

Emission factors were selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions or enhancements of net removals over the crediting period is calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period, and multiplying by twelve.

Outstanding issues (CAR 09, CAR 10) concerning estimation of emission reductions are stated in the Appendix A below.

4.10 Environmental impacts (48)

The PDD lists and attaches documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.

According to the ecological norms of Ukraine the emissions of natural gas to the atmosphere are not pollutants. Therefore no ecological permissions on transporting and supply of natural gas are needed. The only influence on environment by the project implementation is reduction of emissions of natural gas to the atmosphere.

Introduction of this project will allow promoting safety of exploitation of gas-distributing networks that will decrease probability of explosions or fires.

Transboundary influence by the project activity, in accordance with their determination in text of the "Convention on transboundary contamination at long range", ratified by Ukraine, will not occur.

The Project activity does not cause harmful influence to the environment.

The PDD provides conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party, if the analysis referred to above indicates that the environmental impacts are considered significant by the project participants or the host Party.

No outstanding issues considering environmental impact were issued during the determination process.

4.11 Stakeholder consultation (49)

Consultations were conducted with the specialists of Institute of General Energy of NAS of Ukraine. Comments from local Stakeholders were not received. The project activity does not foresee negative influence on the environment and negative social effect.

No outstanding issues considering stakeholder consultation were issued during the determination process.

4.12 Determination regarding small scale projects (50-57)

Not applicable.

4.13 Determination regarding land use, land-use change and forestry (LULUCF) projects (58-64)

Not applicable.

4.14 Determination regarding programmes of activities (65-73)

Not applicable.

5 SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

No comments, pursuant to paragraph 32 of the JI Guidelines, were received.

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the "Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia"" Project in Ukraine. The determination 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 determination consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

Project participants used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides barrier analysis AND common practice analysis to determine that the project activity itself is not the baseline scenario.

Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The determination revealed two pending issues related to the current determination stage of the project: the issue of the written approval of the project and the authorization of the project participant by the host Party. If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 05 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 05) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

The determination is based on the information made available to us and the engagement conditions detailed in this report.

7 REFERENCES

Category 1 Documents:
Documents provided by Vema S.A. that relate directly to the GHG components of the project.

/1/ PDD «Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia"». Version 01, February 07th, 2005.
/2/ PDD « Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia"». Version 02, July 25th, 2011.
/3/ PDD « Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia"». Version 03, August 2nd, 2011.
/4/ PDD « Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia"». Version 04, August 05th, 2011.
/5/ PDD « Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC "Theodosia"». Version 05, August 08th, 2011.
/6/ Guidelines for Users of the Join Implementation Project Design Document Form, version 04, JISC
/7/ Joint Implementation Project Design Document Form, version 01
/8/ Glossary of JI terms, version 03, JISC.
/9/ Guidance on Criteria for Baseline Setting and Monitoring, version 02, JISC.
/10/ JISC "Clarification regarding the public availability of documents under the verification procedure under the Joint Implementation Supervisory Committee." Version 03
/11/ Determination and Verification Manual, version 01
/12/ Letter of Endorsement from National Environmental Investment Agency of Ukraine № 1778/23/7 dated 08.07.2011.

Category 2 Documents:
Background documents related to the design and/or methodologies employed in the design or other reference documents.

/1/ Register of the gas distribution points, gas armature and gas distribution networks CJSC "Theodosia" dated 2005
/2/ Monitoring Plan dated 2005
/3/ Previous investment agreement considering Joint Implementation Project between CJSC "Theodosia" and Vema S.A. dated 18/01/2005
/4/ Order #283 on the providing changes to the working group on the control of natural gas leaks at the gas distributing networks and their removal according to JI project dated 28.05.2011

/5/ Order #22-01/05 on the creation of the working group on the control of natural gas leaks at the gas distributing networks and their removal according to JI project dated 22/01/2005
/6/ Register of the gas distribution points according to the JI project «Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC “Theodosia” »
/7/ Emission Reductions Calculations version 2
/8/ Emission Reductions Calculations version 3
/9/ Emission Reductions Calculations version 4

Persons interviewed:

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

/1/ Kozlovskiy Ye.V. – acting general director

/2/ Yemelyanenko Ye.V. – chief engineer, head of the working group

/3/ Vasyuhin A.I. – engineer, secretary of working group

/4/ Voytenko T.O. – chief of production and technical department, member of the working group

/5/ Belov E.V. – technical consultant, Vema S.A.

DETERMINATION PROTOCOL

Check list for determination, according JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
General description of the project				
Title of the project				
-	Is the title of the project presented?	Reduction of methane emissions on the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC “Theodosia”		
-	Is the sectoral scope to which the project pertains presented?	Yes, Scope 10. Volatile emissions from fuels (solid, liquid fuels and gases)		
-	Is the current version number of the document presented?	Version of Project Design Documentation: 02.		
-	Is the date when the document was completed presented?	Date: July 25, 2011.		
Description of the project				
-	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description)?	The purpose of the project is reduction of the natural gas emissions at gas-transport and gas-distributing infrastructure of CJSC “Theodosia”, which are the result of leakage from gas equipment and gas armature. Situation existing prior to the project, baseline and project scenario are properly described.		
-	Is the history of the project (incl. its JI component) briefly summarized?	Yes, the history of the project (incl. its JI component) is briefly summarized		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project participants				
-	Are project participants and Party(ies) involved in the project listed?	CJSC “Theodosia”, VEMA S.A.		
-	Is the data of the project participants presented in tabular format?	Yes, the data of the project participants is presented in tabular format		
-	Is contact information provided in Annex 1 of the PDD?	Yes, contact information is provided in Annex 1 of the PDD		
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Yes, the host Party is not a project participant		
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine		
-	Region/State/Province etc.	Autonomous Republic of Crimea		
-	City/Town/Community etc.	Feodosiya town and settlements of city type and villages of Feodosiya area (settlements ot city type Prymorskyy, Koktebel, Shchebetivka, Ordzhonikidze, villages Nasypne, Blyzhnye, Sonyachne, Krasnokamyanka, Pidgirne, Yuzhne, Stepne, Beregove)		
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	Detail of the physical location, including information allowing the unique identification of the project is present in the section A.4.1.4		
Technologies to be employed, or measures, operations or actions to be implemented by the project				
-	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the	The technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule are properly described	CAR 01	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	implementation schedule described?	CAR 01. Please provide all the documentation that proves implementation schedule dates.		
Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
-	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	Project activity includes: - repair (replacement) of gas equipment GDP (CGDP), gas armature, pressurizing of the threaded and flanged connections of gas pipelines of CJSC "Theodosia" with the use of modern equipment of the European producers and their analogues of home productions, by the use of modern sealing materials; - monitoring of methane emissions aimed at the exposure of methane emissions through the leakage; - next renewal of leakage of gas equipment GDP (CGDP), gas armature, threaded and flanged connections of gas pipelines. Reduction of natural gas emissions will result in reduction of methane that is greenhouse gas emissions. Absence of project activity means that all equipment, including the old is morally threadbare, but yet capable of working with less leak-proofness than it is foreseen by project activity, will be exploited long in the ordinary mode that does impossible reduction of methane emissions.		
-	Is it provided the estimation of emission reductions over the crediting period?	Yes, it is provided the estimation of emission reductions over the crediting period		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Is it provided the estimated annual reduction for the chosen credit period in tCO2e?	Yes, it is provided the estimated annual reduction for the chosen credit period in tCO2e		
-	Are the data from questions above presented in tabular format?	Yes, the data from questions above are presented in tabular format CAR 02. Please provide the data for 2013-2022 in one table.	CAR 02	
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	CAR 03. Please indicate specific start date of the crediting period because in two different abstracts two different date are indicated 01.01.2008 and 22.01.2008. Please clarify and correct.	CAR 03.	
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	Yes, estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent are provided		
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	CAR 04. Please provide evidence of project approval by the parties involved. CL 01. Please clarify why project approval from the other Party can not be obtained in the moment.	CAR 04, CL 01	
19	Does the PDD identify at least the host Party as a "Party involved"?	Yes, Ukraine is indicated as party involved and a host party.		
19	Has the DFP of the host Party issued a written project approval?	Please refer to CAR 04.	-	
20	Are all the written project approvals by Parties involved unconditional?	Please refer to CAR 04	-	
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project	Please refer to CAR 04	-	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: − A written project approval by a Party involved, explicitly indicating the name of the legal entity? or − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?			
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? − JI specific approach − Approved CDM methodology approach	The project uses JI Specific Approach, which is clearly indicated in the section B.1.		
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	The PDD provides a detailed theoretical description in a complete and transparent manner in the section B.1.		
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance?	Only two options of initial terms can be examined as possible and reliable alternatives for the Project: Option 1: The continuation of the current situation; Option 2: Measures foreseen by Project will be carried out without the use of the mechanism set by the article 6 of Kyoto protocol of UN Framework Convention On Climate Change. Arguments are presented in this PDD (see Paragraph		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (d) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure? (f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?	B.2) prove that maintenance of the existent system on exposure and elimination of emissions is the most credible scenario of development on condition of absence of the Project. All the key factors are properly described in the PDD version 01 section B.1.		
24	If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	Yes, selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants are in line with 23 above		
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	n/a		
Approved CDM methodology approach only				
26 (a)	Does the PDD provide the title, reference	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	number and version of the approved CDM methodology used?			
26 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N\a		
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N\a		
26 (c)	Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	N\a		
26 (d)	Is the baseline identified appropriately as a result?	N\a		
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario	The most recent version of the "Tool for the demonstration and assessment of additionality" ver.05.2. is applied.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".			
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	CAR 05. Please provide a justification of the applicability of the approach chosen.	CAR 05	
29 (b)	Are additionality proofs provided?	Yes, the projects additionality is proved by the barrier analysis. CAR 06. Please show that identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity) because in the respectful section analysis is not provided.	CAR 06	
29 (c)	Is the additionality demonstrated appropriately as a result?	Yes, after all additionality is demonstrated appropriately		
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses	Please refer to CAR 5 and CAR 6	-	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	made in accordance with the selected tool or method?			
Approved CDM methodology approach only				
31 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N\a		
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	N\a		
31 (c)	Are all explanations, descriptions and analyses with regard to additionality made in accordance with the selected methodology?	N\a		
31 (d)	Are additionality proofs provided?	N\a		
31 (e)	Is the additionality demonstrated appropriately as a result?	N\a		
Project boundary (applicable except for JI LULUCF projects				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	There are three types of methane emission sources in the JI Project: (i) Under the control of the project participants: technological methane emissions during plan repair of gas pipeline; (ii) Reasonably attributable to the project: methane emissions gas fittings of house distribution networks; (iii) Significant: – leaks on gas equipment (reducing gears,		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		valves, filters and others like that) of gas-distributing points (cabinet-type gas-distributing points) and – leaks on gas armature (faucets, bolts and others like that), threaded and flanged connections that are located on gas-distributing networks of CJSC "Theodosia".		
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	Yes, the project boundary is defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above		
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	Yes, the delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD by using a figure or flow chart as appropriate		
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	Only methane emissions sources type (iii) are including to the JI project boundary: - leaks on gas equipment of gas-distributing points (cabinet-type gas-distributing points); - leaks on gas armature, threaded and flange joints that are located on gas-distributing networks of CJSC "Theodosia". Complete list of gas-distributing points (2 units), cabinet-type gas-distributing points (138 units) and gas armature (424 units), that are including into the JI project boundary, are set in the Accompanying document 1. Sources of leaks of type (i) - technological leaks of gas		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		at repair of pipes of gas pipelines - are not included in project boundary as CJSC “Theodosia” does not apply technology which allow not to suppose such leaks. Sources of leaks of type (ii) - gas leaks in house distributing networks - are not included in the JI project boundary as first, volumes of such leaks it is much less, than volumes of leaks of sources of type (iii), and secondly, sources of these leaks, as a rule, are in private houses (apartments).		
Approved CDM methodology approach only				
33	Is the project boundary defined in accordance with the approved CDM methodology?	N\a		
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	Project activity start date is 18.01.2005		
34 (a)	Is the starting date after the beginning of 2000?	Yes, see above		
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	Operational lifetime is 18 years / 215 months		
34 (c)	Does the PDD state the length of the crediting period in years and months?	The JI project refers to the first commitment period and presents 5 years/60 months (January 01, 2008 – December 31, 2012). By the initial date of crediting period the date of the first feasible measures were on Project on gas pipelines of	-	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CJSC "Theodosia", namely on February, 07, 2005 was taken. The end date of the crediting period is December 31, 2012. Therefore, length of the crediting period will make 8 years/95 months. If after the first commitment period according to Kyoto Protocol its action will continue, a crediting period of a project will continue till December, 31, 2022. The general period of crediting (before the period of crediting, period of crediting and after completion the period of crediting) will amount in 18 years /215 months. Please see CAR03 above.		
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	The starting date is before the date of the first emission reductions or enhancements of net removals generated by the project		
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	Please see above 34 (b)	-	
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented	Please see above 34 (b)	-	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	separately for those until 2012 and those after 2012?			
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	JI specific approach is used.		
JI specific approach only				
36 (a)	Does the monitoring plan describe: − All relevant factors and key characteristics that will be monitored? − The period in which they will be monitored? − All decisive factors for the control and reporting of project performance?	After detection and measuring of methane emissions the monitoring program was worked out for all gas equipment GDP (CGDP), locking-regulating gas armature, flanged and threaded connections of gas pipelines of CJSC “Theodosia”. Implementation of such program is component part of the project activity. Monitoring embraces both emissions from the sources of leakages that appear again and control after the already repaired gas equipment, on which methane emissions were observed before. Within the framework of JI Project a working group of CJSC “Theodosia” the Register of gas-distributing points and gas armature of JI project "Reduction of methane emissions” was drawn for the gas equipment of gas-distributing points and on the gas armature of gas-distributing networks of CJSC “Theodosia” (see the Supporting document 1), that includes complete information about all GDP (CGDP), locking-regulating gas armature, flanged and threaded connections that enter to the Project boundary. All corresponding data related to the calculation of		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		reduction of methane emissions are kept in an electronic database. Every monitoring report will include all necessary information from this database. The Project data and documents in a paper and/or electronic kind, in accordance with the CJSC "Theodosia" heads orders of 22.01.2005 № 22/01-05 and of 12/05/2011 № 283 are kept till 31.12.2024.		
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	Yes, the monitoring plan specifies the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored		
36 (b)	If default values are used: − Are accuracy and reasonableness carefully balanced in their selection? − Do the default values originate from recognized sources? − Are the default values supported by statistical analyses providing reasonable confidence levels? − Are the default values presented in a transparent manner?	CAR 07. Please indicate the revision of IPCC, from which the data is taken. CAR 08. Please correct for parameter "Potential of global warming" that it is estimated but not calculated since it is taken from IPCC.	CAR 07, 08	
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	Yes, for those values that are to be provided by the project participants, the monitoring plan clearly indicates how the values are to be selected and justified		
36 (b) (ii)	For other values,	Yes, the monitoring plan clearly and conservatively		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Does the monitoring plan clearly indicate the precise references from which these values are taken? − Is the conservativeness of the values provided justified?	indicates the precise references from which these values are taken		
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	See 36 (a)		
36 (b) (iv)	Are International System Unit (SI units) used?	See 36 (a)		
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	n/a		
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	Yes, the use of parameters, coefficients, variables, etc. are consistent between the baseline and monitoring plan		
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of “Guidance on criteria for baseline setting and monitoring”?	Yes, the monitoring plan draw on the list of standard variables contained in appendix B of “Guidance on criteria for baseline setting and monitoring”		
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting	Please refer to Annex 3 of the PDD version 02.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?			
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	See 36 (a) above		
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	Yes, the monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate		
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Yes		
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Yes		
36 (f) (iii)	Are all equations numbered?	Yes		
36 (f) (iv)	Are all variables, with units indicated defined?	Yes		
36 (f) (v)	Is the conservativeness of the	Yes		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	algorithms/procedures justified?			
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Yes		
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	Yes		
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	Yes		
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Yes		
36 (f) (vii)	Are references provided as necessary?	Yes		
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	Yes		
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	Yes		
36 (f) (vii)	Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?	Yes		
36 (g)	Does the monitoring plan identify a national	n/a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?			
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	Please refer to section D.2 of the PDD		
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	Please refer to section D.2 of the PDD		
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Please refer to section D.3 of the PDD		
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Please refer to section D.3 of the PDD		
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the	Yes, the monitoring plan provides, in tabular form, a complete compilation of the data that need to be		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations		
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	Yes, the monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project		
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	Yes, selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants are in line with 36 above		
Approved CDM methodology approach only				
38 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N\a		
38 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
38 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N\a		
38 (c)	Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with the referenced approved CDM methodology?	N\a		
38 (d)	Is the monitoring plan established appropriately as a result?	N\a		
Applicable to both JI specific approach and approved CDM methodology approach				
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period: (a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding	n/a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?			
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	Leakage is not foreseen		
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	See above		
Approved CDM methodology approach only				
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	N\a		
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	Assessment of emissions or net removals in the baseline scenario and in the project scenario is used		
43	If the approach (a) in 42 is chosen, does	Yes, baseline, project emissions and emission		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	reductions are clearly identified		
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?	n/a		
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tones of CO2 equivalent, using global warming potentials defined by	Yes, all the estimates are provided for the whole crediting period on a source by source basis in tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol. The formulae is consistent throughout the PDD. All the data are provided according to relevant format. CAR 09. Please provide excel spreadsheet of ERUs calculation in English as well. CAR 10. In the section E.6, please provide total values	CAR 09, CAR 10	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent? (e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of	for the period of 2013-2022.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	n/a		
Approved CDM methodology approach only				
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	N\a		
47 (b)	Is the estimation of emission reductions or enhancements of net removals presented in the PDD: − On a periodic basis? − At least from the beginning until the end of the crediting period? − On a source-by-source/sink-by-sink basis? − For each GHG? − In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	accordance with Article 5 of the Kyoto Protocol? − Are the formula used for calculating the estimates consistent throughout the PDD? − Are the estimates consistent throughout the PDD? − Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	Under the ecological norms of Ukraine the emissions of natural gas in atmosphere ignore contaminating. Therefore no ecological permissions on transporting and supply of natural gas are needed. The only influence on environment is reduction of emissions of natural gas in the atmosphere. Introduction of this project will allow to promote safety of exploitation of gas-distributing networks, that will decrease probability of explosions or fires. Transfrontal influence from project activity, in accordance with their determination in text of the "Convention on transfrontal contamination at long range", ratified by Ukraine, will not take place.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Harmful influences on the environment the introduction of the Project is not envisaged.		
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	See above.		
Stakeholder comments				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	Consultations were conducted with the specialists of Institute of General Energy of NAS of Ukraine. Comments from Parties concerned were not received. The project activity does not foresee negative influence on the environment and negative social effect.		
Determination regarding small-scale projects (additional elements for assessment)				
50	Does the PDD appropriately specify and justify the SSC project type(s) and category(ies) that fall under: (a) One of the types and thresholds of JI SSC projects as defined in .Provisions for	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	joint implementation small-scale projects.? If the project contains more than one JI SSC project type component, does each component meet the relevant threshold criterion? (b) One of the SSC project categories defined in the most recent version of appendix B of annex II to decision 4/CMP.1, or an additional project category approved by the JISC in accordance with the relevant provision in "Provisions for joint implementation small-scale projects"?			
51	Does the SSC PDD confirms and shows that the proposed JI SSC project is not a debundled component of a large project by explaining that there does not exist a JI (SSC) project with a publicly available determination in accordance with paragraph 34 of the JI guidelines: (a) Which has the same project participants; and (b) Which applies the same technology/measure and pertains to the same project category; and (c) Whose determination has been made publicly available in accordance with paragraph 34 of the JI guidelines within the	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	previous 2 years; and (d) Whose project boundary is within 1 km of the project boundary of the proposed JI SSC project at the closest point?			
Applicable to bundled JI SSC projects only				
52 (a)	Do all projects in the bundle: (i) Have the same crediting period? (ii) Comply with the provisions for JI SSC projects defined in "Provisions for joint implementation small-scale projects", in particular the thresholds referred to in 50 (a) above? (iii) Retain their distinctive characteristics (i.e. location, technology/measure etc.)?	N\a		
52 (b)	Does the composition of the bundle not change over time?	N\a		
52 (c)	Has the AIE received (from the project participants): (i) Information on the bundle using the form developed by the JISC (F-JI-SSCBUNDLE)? (ii) A written statement signed by all project participants indicating that they agree that their individual projects are part of the bundle and nominating one project participant to represent all project participants in communicating with the JISC?	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(iii) Indication by the Parties involved that they are aware of the bundle in their project approvals referred to in 19 above?			
53	If the project participants prepared a single SSC PDD for the bundled JI SSC projects, do(are) all the projects: (a) Pertain to the same JI SSC project category? (b) Apply the same technology or measure? (c) Located in the territory of the same host Party?	N\a		
54	If the project participants prepared separate SSC PDDs for the bundled JI SSC projects, do(are) all the projects: (a) Have SSC PDDs been prepared for all JI SSC projects in the bundle? (b) Does each SSC PDD contain a single JI SCC project in the bundle?	N\a		
55	If the projects in the bundle use the same baseline, does the F-JI-SSC-BUNDLE provide an appropriate justification for the use of the same baseline considering the particular situation of each project in the bundle?	N\a		
56	Does the PDD indicate which of the following approaches is used for	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	establishing a monitoring plan? (a) By preparing a separate monitoring plan for each of the constituent projects; (b) By preparing an overall monitoring plan including a proposal of monitoring of performance of the constituent projects on a sample basis, as appropriate.			
56 (b)	If the approach 57 (b) above is used, (i) Are all the JI SSC projects located in the territory of the same host Party? (ii) Do all the JI SSC projects pertain to the same project category? (iii) Do all the JI SSC projects apply the same technology or measure? (iv) Does the overall monitoring plan reflect good monitoring practice appropriate to the bundled JI SSC projects and provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled projects?	N\a		
Applicable to all JI SSC projects				
57	Is the leakage only within the boundaries of non-Annex I Parties considered?	N\a		
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
58	Does the PDD appropriately specify how the LULUCF project conforms to: (a) The definitions of LULUCF activities included in paragraph 1 of the annex to	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	decision 16/CMP.1, applying good practice guidance for LULUCF as decided by the CMP, as appropriate? (b) In the case of afforestation, reforestation and/or forest management projects, the definition of "forest" selected by the host Party, which specifies: (i) A single minimum tree crown cover value (between 10 and 30 per cent)? and (ii) A single minimum land area value (between 0.05 and 1 hectare)? and (iii) A single minimum tree height value (between 2 and 5 metres)?			
JI specific approach only				
59	Baseline setting - in addition to 22-26 above Does the PDD provide an explanation how the baseline chosen: − Takes into account the good practice guidance for LULUCF, developed by the IPCC? − Ensures conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol?	N\a		
60	Project boundary - alternative to 32-33 (a) Does the project boundary geographically delineate the JI LULUCF project under the control of the project	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	participants? (a) If the JI LULUCF project contains more than one discrete area of land, (i) Does each discrete area of land have a unique geographical identification? (ii) Is the boundary defined for each discrete area? (ii) Does the boundary not include the areas in between these discrete areas of land? (b) Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant? (c) Does the project boundary account for all changes in the following carbon pools: − Above-ground biomass; − Below-ground biomass; − Litter; − Dead wood; and − Soil organic carbon? (c) Does the PDD provide: (i) The information of which carbon pools are selected? (ii) If one or more carbon pools are not			

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	selected, transparent and verifiable information that indicates, based on conservative assumptions, that the pool is not a source? (d) Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria in (b) above?			
61 (a)	Project boundary - alternative to 32-33 (cont.) Are the delineation of the project boundary and the gases and sources/sinks included appropriately described and justified in the PDD?	N\a		
61 (b)	Project boundary - alternative to 32-33 (cont.) Are all gases and sources/sinks included explicitly stated, and the exclusions of any sources/sinks related to the baseline or the LULUCF project appropriately justified?	N\a		
62	Monitoring plan - in addition to 35-39 Does the PDD provide an appropriate description of the sampling design that will be used for the calculation of the net anthropogenic removals by sinks occurring within the project boundary in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	plots and plot distribution etc.?			
63	Does the PDD take into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?	N\a		
Approved CDM methodology approach only				
64 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N\a		
64 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N\a		
64 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N\a		
64 (c)	Are all explanations, descriptions and analyses made in accordance with the referenced approved CDM methodology?	N\a		
64 (d)	Are the baseline, additionality, project boundary, monitoring plan, estimation of enhancements of net removals and leakage established appropriately as a result?	N\a		
Determination regarding programmes of activities (additional/alternative elements for assessment)				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
66	Does the PDD include: (a) A description of the policy or goal that the JI PoA seeks to promote? (b) A geographical boundary for the JI PoA (e.g. municipality, region within a country, country or several countries) within which all JPAs included in the JI PoA will be implemented? (c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including: − The maintenance of records for each JPA? − A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)? − Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA? (d) A description of each type of JPAs that will be included in the JI PoA, including the technology or measures to be used? (e) The eligibility criteria for inclusion of JPAs to the JI PoA for each type of JPA in the JI PoA?	N\a		
67	*Project approvals by Parties involved* -	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	additional to 19-20 Are all Parties partly or entirely within the geographical boundary for the JI PoA listed as "Parties involved" and indicated as host Parties in the PDD?			
68	*Authorization of project participants by Parties involved - additional to 21* Is the coordinating entity presented in the PDD authorized by all host Parties to coordinate and manage the JI PoA?	N\a		
69	*Baseline setting - additional to 22-26* Is the baseline established for each type of JPA?	N\a		
70	*Additionality - additional to 27-31* Does the PDD indicate at which of the following levels that additionality is demonstrated? (a) For the JI PoA (b) For each type of JPA	N\a		
71	*Crediting period - additional to 34* Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?	N\a		
72	*Monitoring plan - additional to 35-39* Is the monitoring plan established for each technology and/or measure under each type of JPA included in the JI PoA?	N\a		
73	Does the PDD include a table listing at least one real JPA for each type of JPA?	N\a		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
73	For each real JPA listed, does the PDD provide the information of: (a) Name and brief summary of the JPA? (b) The type of JPA? (c) A geographical reference or other means of identification? (d) The name and contact details of the entity/individual responsible for the operation of the JPA? (e) The host Party(ies)? (f) The starting date of the JPA? (g) The length of the crediting period of the JPA? (h) Confirmation that the JPA meets all the eligibility requirements for its type, including a description of how these requirements are met? (i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?	N\a		

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	Determination team conclusion
CAR 01. Please provide all the documentation that proves implementation schedule dates.		Such documents have been presented: 1. The copy of preliminary investment contract on January, 18, 2005 in relation to JI project between company VEMA S.A. and CJSC «Theodosia». 2. The copy of the Order of the General Director №22/01-05 from 22/01/2005 about organization of Working group under the JI project. 3. The copy of the Order of the General Director №283 from 12/05/2011 about upgrade of Working group under the JI project. 4. PDD version 01 of 07/02/2005 5. Letter of Endorsement for the JI Project № 1778/23/7 of 08.07.2011 of State Environmental Investment Agency of Ukraine	All the evidences found satisfactory. Issue is closed.
CAR 02. Please provide the data for 2013-2022 in one table.		See corrected PDD version 03	Correction is accepted. Issue is closed.

CAR 03. Please indicate specific start date of the crediting period because in two different abstracts two different dates are indicated 01.01.2008 and 22.01.2008. Please clarify and correct.		See corrected PDD version 03	Correction is accepted. Issue is closed.
CAR 04. Please provide evidence of project approval by the parties involved.	19	The JI project will receive approval from both Parties after sending of the determination report to the State Environmental Investment Agency of Ukraine (SEIAU) and to the Federal Office of Environment (FOEN) of Swiss Confederation.	Pending
CL 01. Please clarify why project approval from the other Party can not be obtained in the moment.	19	According to the Federal Office of Environment (FOEN) of Swiss Confederation procedure the Letters of Approval stand out with 25 on 27 number of each month. If documents are submitted after 10 dates the Letters of Approval can be received with 25 on 27 number of next month. As under the project the package of documents for reception of the Letter of Approval has been submitted to FEON after July, 10th reception of the Letter of Approval from FEON is expected from August, 25 till August, 27th.	Issue is closed.
CAR 05. Please provide a justification of the applicability of the approach chosen.	29 (a)	See corrected PDD version 03	Correction is accepted. Issue is closed.

CAR 06. Please show that identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity) because in the respectful section analysis is not provided.	29 (b)	See corrected PDD version 03	Correction is accepted. Issue is closed.
CAR 07. Please indicate the revision of IPCC, from which the data is taken.	36(b)	See corrected PDD version 03	Correction is accepted. Issue is closed.
CAR 08. Please correct for parameter "Potential of global warming" that it is estimated but not calculated since it is taken from IPCC.	36(b)	According to the table of ***Parameters to be monitored***, presented on the page 15 of the Methodology AM0023 version 3.0, parameter "Global warming potential" is calculated, but not estimated. ***KZ:*** It is calculated previously but PP does NOT calculate this parameter. It is default data, which is, in this particular project, estimated. ***VEMA:*** See corrected PDD version 04	Correction is accepted. Issue is closed.
CAR 09. Please provide excel spreadsheet of ERUs calculation in English as well.	45	Supporting document 2 (spreadsheet of ERUs calculation) on English has been presented	Correction is accepted. Issue is closed.
CAR 10. In the section E.6, please provide total values for the period of 2013-2022.	45	See corrected PDD version 05	Correction is accepted. Issue is closed.