DETERMINATION REPORT

OJSC "KAZANORGSINTEZ"

DETERMINATION OF THE REALIZATION OF A COMPLEX OF ENERGY SAVING ACTIVITIES AT THE OJSC "KAZANORGSINTEZ"

REPORT NO. RUSSIA-DET/0118/2011
REVISION NO. 02

BUREAU VERITAS CERTIFICATION

Determination Report on JI project

"Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez"

Date of first issue:	Organizational unit:
14/04/2011	Bureau Veritas Certification Holding SAS
Client:	Client ref.:
SIC Global LLP	Mr. Viktor Kolyesnikov

Summary:

Bureau Veritas Certification has made the determination of the "Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez" project of company OJSC "Kazanorgsintez, located in the city of Kazan, Republic of Tatarstan, Russian Federation, 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 Corrective Actions Requests, 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 applies the appropriate baseline and monitoring methodology and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report No.:	Subject Group:
RUSSIA-det/0118/2011	JI

Project title:

"Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez" project of company OJSC "Kazanorgsintez"

Work carried out by:

Leonid Yaskin – Lead verifier
Alexander Kotsybenkov - Specialist

Work reviewed by:

Ivan Sokolov – Internal Technical Reviewer

Work approved by:

Leonid Yaskin – Country Operational Manager

Date of this revision:	Rev. No.:	Number of pages:
30/06/2011	02	52

☒

☐ Limited distribution

☐ Unrestricted distribution

Abbreviations

AIE	Accredited Independent Entity
BVC	Bureau Veritas Certification
APG	Associated Petroleum Gas
CAR	Corrective Action Request
CL	Clarification Request
CO2	Carbon Dioxide
DDR	Draft Determination Report
DR	Document Review
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
ERU	Emission Reduction Unit
GHG	Greenhouse House Gas(es)
IE	Independent Entity
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
KOS	OJSC "Kazanorgsintez"
NG	Natural gas
NGO	Non Governmental Organization
PDD	Project Design Document
PP	Project Participant
RF	Russian Federation
SIC	SIC Global LPP
tCO2e	Tonnes CO2 equivalent
UNFCCC	United Nations Framework Convention for Climate Change

Table of Contents *Page*

1 INTRODUCTION

SIC Global LLP (hereafter called "SIC") has commissioned Bureau Veritas Certification to determine JI project "Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez" (hereafter called "the project") located in the city of Kazan, Republic of Tatarstan, Russian Federation.

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:

Dr. Leonid Yaskin
Bureau Veritas Certification Climate Change Lead Verifier

Dr. Alexander Kotsybenkov
Bureau Veritas Certification Climate Change Specialist

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal reviewer

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 SIC 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 Guidance on criteria for baseline setting and

monitoring, Kyoto Protocol, to be checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, SIC revised the original PDD v.01 dated 11/02/2011 and following a set of revisions resubmitted it as v.08 dated 29/06/2011.

The first deliverable of the document review was the Determination Protocol Revision 01 dated 07/03/2011 which contained 16 CARs.

The determination findings presented in this Determination Report Revision 01 and its Appendix A relate to the project as described in the PDD versions 01 (published) through version 08 (final) dated 29/06/2011.

2.2 Follow-up Interviews

On 25/05/2011 the AIE Lead Verifier L. Yaskin performed interviews with the project participant KOS and the PDD developer SIC to confirm the selected information and to clarify some issues identified in the document review. The list of the persons interviewed is provided in References. The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Project participant KOS	➢ Project history and Implementation schedule ➢ Baseline scenario ➢ Project scenario ➢ Input data for investment analysis ➢ Commissioning ➢ QC & QA Procedures ➢ Environmental permissions ➢ Environmental Impact Assessment
CONSULTANT SIC	➢ Baseline scenario ➢ Investment barrier and uncommon practice ➢ Project scenario ➢ Investment analysis ➢ Emission reduction calculation
Stakeholders	➢ N/A

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to raise 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 verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

3 PROJECT DESCRIPTION (quoted by PDD)

Open Joint Stock Company "Kazanorgsintez" is one of the largest chemical enterprises in the Russian Federation. OJSC "Kazanorgsintez" produces more than 38% of Russian polyethylene and this is biggest exporter of its. The company occupies a leading position in the production of pipeline polyethylene pipes, phenol, acetone, antifreeze, chemicals for oil and natural gas dehydration. Annually OJSC "Kazanorgsintez" produces more than 1(one) million tons of chemical products.

An important stage of chemical industry development in the USSR was “May” Plenum of the CPSU Central Committee (1958), where it was decided to accelerate the development of chemical industry. Directorate of Kazan chemical plant was determined and approved by RSFSR Council of Ministers Decision at July14, 1958. First Stage plant industrial objects constructing was started in 1959. First trading unit of phenol and acetone was obtained July 13, 1963. Plant was quickly developed from start-up, it was realized a number of large-scale manufacturing facilities modernization.

Production technology of basic organic synthesis, inorganic products, polymers and products from them, realized by OJSC "Kazanorgsintez", due to the specific manufacturing processes is associated with

generation, emissions and discharges of harmful substances into the environment. Thereby the company pays much attention to environmental protection problems. Company’s business model is aimed to minimization of negative impact on the environment. Company activities perform in conformity with the environmental legislation of Russian Federation and Republic of Tatarstan. Plans, aimed at reducing the harmful effects of the objects of exploitation on the environment, the rational use of water resources and protection of water bodies, have developed and implemented annually.

Project history goes back to 2000, when at the meeting of Technical Council of OJSC "Kazanorgsintez" it was made a decision to provide large-scale modernization of the enterprise to improve efficiency of manufacturing. Taking into account the opportunities of fund usage on modernization of manufacturing at the expense of join implementation mechanisms, by guidance of the OJSC "Kazanorgsintez", were initiated the adoption of the join implementation project "Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez".

First stage of realization of the project under the results of the Technical Council session was resolution about conclusion of contracts with a firm "Tenkimont International SA” (Italy) for the installation of two packaging machines "Kompakta 1300" instead of older and more energy-intensive machinery; and with the firm "Maveg Industrieanlagen GmbH" (Germany) for the installation of integrated particulate concentrate production line.

At the plant was designed, approved and implemented "Energy Saving Program in 2000-2005" for successful implementation of a joint implementation project. In 2006, was developed and approved "Program of resource efficiency, 2006-2010", which became a logical continuation of earlier acting program. The results of running these programs appear in the annual reports that are published on the official site of OJSC "Kazanorgsintez”1.

In the absence of project activity the baseline scenario for OJSC "Kazanorgsintez" was to maintain existing at the beginning of 2000 equipment in good condition, herewith the consumption of energy for manufacturing and, consequently, greenhouse gas emissions into the environment would remain constant at 2000 levels.

Project activities are aimed to the improving of the enterprise efficiency by modernizing of 8 production types, such as: ethylene Stage I, ethylene Stage II, ethylene Stage III, ethylene Stage IV, high density

polyethylene (hereinafter - HDPE), low-density polyethylene (hereinafter - LDPE) Stage II, LDPE Stage III, phenol.

The main goal of implementing of the planned manufacturing efficiency improving activities on OJSC "Kazanorgsintez" is to reduce the combustion of natural gas used for thermal and electricity energy producing for industrial needs of the enterprise that will reduce greenhouse gas emissions.

The result of this project was initiated in 2000 phased modernization of OJSC "Kazanorgsintez” production facilities, the above. The aim of modernization is the installation of high efficient equipment that will reduce the flow of heat and electricity for production, thus will reduce the volume of natural gas combustion to produce heat and electricity. The main supplier of thermal energy for OJSC "Kazanorgsintez" is the CHP-3, Kazan. Reducing thermal energy consumption in the manufacturing process will reduce the amount of natural gas combustion for heat generation the CHP-3, Kazan. Reducing of the electricity consumption for the OJSC "Kazanorgsintez" manufacturing processes will reduce the amount of fossil fuel consumption by power plants of the Russian Federation that supply electricity to the grid of Russia.

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 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 16 Corrective Action Requests.

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

4.1 Project approvals by Parties involved (19-20)

The project has no approvals by the Host Party, therefore CAR 06 remains pending.

A written project approval by Party B should be provided to the AIE and made available to the secretariat by the AIE when submitting the first verification report for publication in accordance with paragraph 38 of the JI guidelines. It has not been provided to AIE at the determination stage.

4.2 Authorization of project participants by Parties involved (21)

The participation for OJSC "Kazanorgsintez" listed as project participant in the PDD is not authorized by the Host Party because the project approval by the Host Party was not received. Party B is not determined.

The authorization is deemed to be carried out through the issuance of the project approvals.

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.

JI specific approach

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 likely future scenarios available for the project owner OJSC "Kazanorgsintez" and selecting the most likely one. (AIE Note: the term likely is used instead of the JI terms plausible.) Two alternatives were listed: Alternative1 "Continuation of existing situation" and Alternative 2 "Implementation of the project activities in the absence of the JI benefits". Based on their analysis taking into account the results of the investment analyses presented in Section B.2, a conclusion is made that Alternative 1 is the most likely scenario.

(b) Taking into account key appropriate factors that affect a baseline, such as significant investments, imported technologically sophisticated equipment, local availability of skilled staff.

(c) In a basically transparent manner with regard to the choice of the JI specific approach and related assumptions, parameters, data sources and key factors for baseline setting, which are listed in tabular format in Section B.1.

(d) Taking into account of the uncertainty and using a conservative assumption from identified sources (see in brackets) with regard to the following parameters: electric grid emission factor (2004 Netherlands

Guidelines), heat production efficiency (Tool to determine the baseline efficiency of thermal or electric energy generation systems, Version 01), share of non-oxidized carbon in natural gas (National report on inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the 1990-2006) .

(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”.

Outstanding issue related to Baseline setting (22-26), PP’s response and the AIE conclusion are summarized in Appendix A (refer to CAR 07).

The issued CAR concerns justification of the approach to estimation of baseline efficiency for thermal energy production used for investment analysis.

4.4 Additionality (27-31)

JI specific approach

The “Tool for the demonstration and assessment of additionality” Version 05.2 is chosen for justification of additionality. Additionality proves were provided through investment analysis of the project activity without JI registration, barrier analysis and common practice analysis.

Investment analysis is performed in terms of calculation of the project IRR and NPV and determining the economic attractiveness of the project without and with JI registration. The discount rate 14% was used with reference to OJSC "Kazanorgsintez" financial statements. The analysis shows that at the input data used and without JI registration the project IRR is below the discount rate and NPV < 0. The sensitivity analysis of ±10% changes of energy costs gave the same results.
The investment analysis is followed by analysis of financial and technological barriers. This analysis could be dropped as the investment analysis is applied.

The project activity is stated to have been not the common practice in the Russian chemical industry. Search in Internet made by AIE did not reveal information about activities of the same scale, the same set of measures, in the same geographical area.

All in all, a conclusion is made in PDD that “The implementation of the project will reduce greenhouse gas emissions into the environment that

can not be achieved in the absence of the project. Any reduction in emissions of harmful substances into the environment, which will be achieved within the framework of the joint implementation project, will be an extra”. AIE determines this conclusion as the confirmation that the project is additional.

Outstanding issue related to Additionality (27-31), PP’s response and the AIE conclusion are summarized in Appendix A (refer to CAR 08, CAR 09).

The issued CAR concern:
- Transparency of the financial analysis as regards the input data, time horizon and sensitivity analysis (CAR 08);
- Inclusion of the economic-financial barriers in the barrier analysis (CAR 09).

4.5 Project boundary (32-33)

JI specific approach

The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are (i) under the control of the project participants, (ii) reasonably attributable to the project, and (iii) significant.

These are:
- Baseline CO2 emissions from electricity and heat consumption in baseline scenario;
- Project CO2 emissions from electricity and heat consumption in project activities.

In response to CAR 10 the delineation of the project boundary and the gases and sources included were included, appropriately described and justified in the PDD.

Based on the above assessment, the AIE hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity.

Outstanding issue related to Project boundary (32-33), PP’s response and the AIE conclusion are summarized in Appendix A (refer to CAR 10, CAR 11).

The issued CAR concern:
- Missing figure and flow chart to delineate and justify the project boundary and the gases and sources (CAR 10);
- Justification of exclusion of CH4 and N2O emissions (CAR 11).

4.6 Crediting period (34)

The proposed JI project consists of several stages of the implementation of measures to improve energy efficiency of production OJSC "Kazanorgsintez".

Launch date of the joint implementation project is the date of packaging machines "Compacta 1300" commissioning instead of older more energy-intensive machines.

Based on the protocol guarantee tests that were performed by "Tenkimont International SA (Italy), packaging machines "Compacta 1300" were put into operation. Guarantee tests were conducted from 04 till 05 April, 2001. Hence, Starting date of the joint implementation project is defined as April 5, 2001.

The PDD states the expected operational lifetime of the project in years and months, which is 20 years or 240 months.

The PDD states the length of the crediting period in years and months, which is 5 years or 60 months as from 01/01/2008 to 31/12/2012. On its starting date 01/01/2008 the first emission reductions were generated by the project.

Outstanding issue related to Monitoring plan (35-39), PP’s response and the AIE conclusion are summarized in Appendix A (refer to CAR 12).

The issued CAR 12 concerns the definition of the project starting date.

4.7 Monitoring plan (35-39)

JI specific approach

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

The monitoring plan describes:

(a) data to be monitored (measured): amounts of electric and thermal energy consumed for production of particular product (refer to D.1.1.1) and volume of production of a particular product (refer to D.1.1.3);

(b) the period in which they will be monitored: monthly;

(c) formulae for estimation of project and baseline emissions by the monitored and default data;

(d) default values of key parameters which are taken from National Inventory Report; "Operational Guidelines for Project Design Documents of Joint Implementation Projects. Volume 1: General guidelines. Version 2.3. Ministry of Economic Affairs of the Netherlands." 2004; Tool to determine the baseline efficiency of thermal or electric energy generation systems, Version 01;

(e) all decisive factors for the control and reporting of project performance: information on the effect of the project on environment; quality control (QC) and quality assurance (QA) procedures; the operational and management structure that will be applied in implementing the monitoring plan.

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 to be monitored such those listed in the PDD, Sections D.1.1.1 and D.1.1.3.

The monitoring plan is developed subject to the list of standard variables contained in appendix B of “Guidance on criteria for baseline setting and monitoring” developed by the JISC.

The monitoring plan explicitly and clearly distinguishes:
- 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 the default data used;
- Data and parameters that are monitored throughout the crediting period, such as those presented in Section D.1.1.1 for the project and Section D.1.1.3 for the baseline.

Step-by-step application of the used approach for monitoring is described in PDD Section D including monitoring procedures, formulae, parameters, data sources etc.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording; please refer to PDD, Section D.1.1.1 and Section D.1.1.3.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions and project emissions, as appropriate, such as Formulae in Section D.1.1.2 for project emissions and Formulae in Section D.1.1.4 for baseline emissions.

The monitoring plan outlines the quality assurance and control procedures for the monitoring process; all the QC/QA procedures are specified in PDD Section D.2. The procedures include, as appropriate, information on calibration of measuring devices.

The monitoring plan clearly describes the operational and management structure regarding the monitoring activities. A monitoring group is formed lead by Deputy Director General for Research and Development OJSC "Kazanorgsintez". The group communicates with technological personnel.

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 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 related to Monitoring plan (35-39), PP’s response and the AIE conclusion are summarized in Appendix A (refer to CAR 13 and CAR 14).

The issued CARs concern:
- Loose arrangement of Formulae in Section D.1.1.4 (CAR 13);
- Missing reference to national monitoring standard used for monitoring (measurements) routines (CAR 14).

4.8 Leakage (40-41)

JI specific approach

Leakage is conservatively neglected due to the specifics of the project activity which is aimed at the reduction of energy which would be consumed in the baseline. The project implementation is expected to reduce consumption of natural gas, and as a consequence, reduction of natural gas leakage from the gas transportation system of the Russian Federation.

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

JI specific approach

The PDD indicates assessment of emissions in the baseline and project scenario as the approach chosen to estimate the emission reductions of the project.

The PDD provides the ex ante estimates of:
(a) Emissions for the project scenario (within the project boundary), which are 4 140 442 tCO2e;
(b) Emissions for the baseline scenario (within the project boundary), which are 5 651 470 tCO2e;
(c) Emission reductions (based on (a), (b) above), which are 1 511 028 tCO2e.

The formulae used for calculating the estimates are referred in the PDD, Sections D.1.1.2, D.1.1.4, and D.1.4.

For calculating the estimates referred to above, key factors defined in the monitoring plain influencing the project and baseline emissions were taken into account, as appropriate.

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

The estimates referred to above are consistent throughout the PDD.

The PDD Section E includes an illustrative ex ante emissions calculation.

Outstanding issue related to Estimation of emission reduction (42-47), PP’s response and the AIE conclusion are summarized in Appendix A (refer to CAR 15).

The issued CAR 15 requests to provide explicitly estimates for each source of emissions: consumption of electric energy and heat energy.

4.10 Environmental impacts (48)

In response to CAR 16 PDD Section F.1 listed the documentation related to environmental impacts of the project as required by the host Party: environmental impact assessment, state expertise conclusions, and state permits for air emissions.

4.11 Stakeholder consultation (49)

Stakeholder consultation was not undertaken as it is not required by the host party.

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 “Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez” project in Russia. 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 participant used the JI specific approach for demonstration of the additionality. In line with this approach, the PDD provides investment 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 review of the project design documentation and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfilment of stated criteria.

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 07 dated 20/05/2011 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party 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 PNGP and NCSF that relate directly to the GHG components of the project.

/1/ “Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez”

PDD Version 01 dated 11/02/2011

PDD Version 08 dated 29/06/2011

/2/ Excel spreadsheet with calculation of emission reduction.

/3/ Excel spreadsheet with financial model.

/4/ Excel spreadsheet with sensitivity analysis.

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

/1/ Minutes of meeting on 10/08/2000 of OJSC Kazanorgsintez Technical Council on Possibilities of realization of energy saving measures (JI prior consideration),

/2/ Guidelines for Users of the Joint Implementation Project Design Document Form/Version 04, JISC.

/3/ JISC Guidance on criteria for baseline setting and monitoring. Version 02.

/4/ Glossary of Joint Implementation terms. Version 02, JISC.

/5/ 2006 IPC Guidelines on National Greenhouse Gas Inventories. Volume 2 Chapter 4 page 4.45.

/6/ “Regulation of realization of Article 6 of Kyoto Protocol to United Nation Framework Convention on Climate Change”. Approved by the RF Government Decree # 843 of 28/10/2009 “About measures on realization of Article 6 of Kyoto Protocol to United Nation Framework Convention on Climate Change”.

/7/ Documents confirming coordination of technical design documentation, contracting for construction works, pilot tests, and commissioning of project energy efficiency measures.

/8/ Specific technological norms on energy consumption in 1997-1999 and 2001-2002.

/9/ Monthly reports on fulfillment of planned consumption norms for electric energy, heat, and products for 2008, 2009, 2010.

/10/ Information on cost of electric and heat energy for OJSC Kazanorgsintez in 2000 – 2010.

/11/ Excepts from EIA, Soyuzkhimpromproject, Kazan, 2006.

/12/ State expertise conclusions on capital construction objects, conclusions of industrial safety expertise, permits for air emissions.

/13/ OJSC Kazanorgsintez. Annual Report 2008.

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/ V. Kolesnikov – Representative of SIC Global LLP acting on behalf of Kazanorgsintez by warrant No 12/323 signed by General Director of KOS L.S. Alekhin

/2/ A. Bogonos – Project Manager, SIC Global LPP

/3/ R. Shigabutdinov - Head of Production Department, OJSC Kazanorgsintez

/4/ L. Galyaviev - Head of Technical Department, OJSC Kazanorgsintez

DETERMINATION PROTOCOL

Table 1

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?	The title of the project is: "Realization of a complex of energy saving activities at the OJSC "Kazanorgsintez".		OK
-	Is the sectoral scope to which the project pertains presented?	The sectoral scopes is: (1) Energy industries (renewable/non-renewable sources). **CAR 01.** Footnote 1 relates to CDM and hence is inadequate.	CAR 01	OK
-	Is the current version number of the document presented?	PDD Version 01. Final Version 8		OK
-	Is the date when the document was completed presented?	PDD dated 11 February 2011. Final Version 8 dated 29 June 2011.		OK
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	PDD Section A.2 reads: “Project activities are aimed to the improving of the enterprise efficiency by modernizing of 8 production types, such as: ethylene Line I, ethylene Line II, ethylene Line III, ethylene Line IV, high density polyethylene (hereinafter - HDPE), low-density polyethylene (hereinafter - LDPE) line II, LDPE Line III, phenol.		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	c) Project scenario (expected outcome, including a technical description)?	The main goal of implementing of the planned manufacturing efficiency improving activities on OJSC "Kazanorgsintez" is to reduce the combustion of natural gas used for thermal and electricity energy producing for industrial needs of the enterprise that will reduce greenhouse gas emissions”. Requirements a), b), c) to the content of Section A.2 are basically met.		
-	Is the history of the project (incl. its JI component) briefly summarized?	**CAR 02.** The history of the project’s JI component is not summarised. There is no reference to any event at which a decision to implement the modernisation programme with the use of the JI mechanism was made. Please make it transparent if at the 2000 meeting of Technical Council of OJSC "Kazanorgsintez" the whole modernisation programme worth 111 MEuro was approved or just its part started in 2000 (72% total investments). If the latter is true please provide evidence that the parts of the programme started throughout 2002-2008 were approved as JI project.	CAR 02	OK
Project participants				
-	Are project participants and Party(ies) involved in the project listed?	Party(ies) and project participants involved in the project are listed as follows: - Party A is the Russian Federation with its legal entity OJSC " Kazanorgsintez "; - Party B is UK with its legal entity "SIC GLOBAL LLP".		OK
-	Is the data of the project participants presented in tabular format?	The data of the project participants are presented in due tabular format.		OK
-	Is contact information provided in Annex 1 of the PDD?	Contact information is provided in Annex 1 of the PDD.		OK
-	Is it indicated, if it is the case, if the Party	**CAR 03.** It is not indicated in Section A.3 that Russian		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	involved is a host Party?	Federation is the Host Party.		
Technical description of the project				
Location of the project				
-	Host Party(ies)	Russian Federation.		OK
-	Region/State/Province etc.	The Republic of Tatarstan.		OK
-	City/Town/Community etc.	Kazan city.		OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	**CAR 04.** Please provide information allowing unique identification of the project, for instance geographical coordinates.	CAR 04	OK
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 implementation schedule described?	PDD Section A.4.2 refers to a number of sub-activities implemented by the project within 5 production lines, such as reconstruction and modernisation of existing facilities and equipment, installation and commissioning of new facilities and equipment, the use of exhaust heat, optimization of technological processes. Forecasted data on reduction of specific electric energy and thermal energy consumption from the project activities are provided where appropriate. Implementation schedules are provided for each production line. Some 25 sub-activities are identified in PDD Section A.4.2. 3 sub-activities started in 2000. The biggest one is “Installing new-energy efficient equipment for the production of HDPE” (73% of total investment). **CAR 05.** According to the investment analysis seven sub-	CAR 05	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		activities were not invested and implemented. As a result total investment is 105 rather than 111 ME. Please correct Sections A.4.2, B.1 and B.2 accordingly.		
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)	Section A.4.3 reads: ”The proposed project will reduce the relative consumption of heat and electricity per ton of production OJSC «Kazanorgsintez". Reduction of relative consumption of heat and electricity for production will lead to a decline in fossil fuel power plants of the Russian Federation for the production of heat and electricity. Reduction of fossil fuel consumption would reduce emissions of greenhouse gases into the environment that occur as a result of burning fossil fuels”.		OK
-	Is it provided the estimation of emission reductions over the crediting period?	The estimation of emission reductions over the crediting period is provided.		OK
-	Is it provided the estimated annual reduction for the chosen credit period in tCO2e?	The estimated annual reduction for the chosen credit period is provided in tCO2e.		OK
-	Are the data from questions above presented in tabular format?	The data from questions above are presented in tabular format. Refer to Section A.4.3.1.		OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	The length of the crediting period is indicated as 5 years.		OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	Total as well as annual and average annual emission reductions in tonnes of CO2 equivalent are provided in accordance with the calculated values in the spreadsheet provided to AIE.		OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as “Parties	**CAR 06.** The project has no written approvals by the Parties	CAR 06	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	involved” in the PDD provided written project approvals?	involved. AIE Note: The project approval by the Host Party will be provided after the determination statement is issued by the AIE.		
19	Does the PDD identify at least the host Party as a “Party involved”?	Host Party involved is the Russian Federation.		OK
19	Has the DFP of the host Party issued a written project approval?	Conclusion is pending a response to CAR 05.	Pending	
20	Are all the written project approvals by Parties involved unconditional?	Yes, the written project approvals by Parties involved are unconditional.		OK
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project 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?	- The project participants OJSC "Kazanorgsintez" and "SIC GLOBAL LLP" are deemed to be authorized with the issue of the relevant project approvals. Conclusion is pending a response to CAR 05.	Pending	
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	It is explicitly indicated that a JI specific approach is applied with the use of selected elements of ACM0012.		OK
JI specific approach only				
23	Does the PDD provide a detailed theoretical	A detailed theoretical description in a complete and		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	description in a complete and transparent manner?	transparent manner is provided for the applied JI specific approach. It includes the following steps: - Identification and listing of the likely future baseline scenarios; - Exclusion of alternatives which do not meet requirements of applicable laws and regulations; - Exclusion of alternatives which face “excessive obstacles”. - Identification and listing key factors for baseline setting.		
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? − 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	Baseline is established: (g) By listing and describing likely future scenarios available for the project owner OJSC "Kazanorgsintez" and selecting the most likely one. (AIE Note: the term likely is used instead of the JI terms plausible.) Two alternatives were listed: Alternative1 “Continuation of existing situation” and Alternative 2 “Implementation of the project activities in the absence of the JI benefits”. Based on their analysis taking into account the results of the investment analyses presented in Section B.2, a conclusion is made that Alternative 1 is the most likely scenario. (h) Taking into account key appropriate factors that affect a baseline, such as significant investments, imported technologically sophisticated equipment, local availability of skilled staff. (i) In a basically transparent manner with regard to the choice of the JI specific approach and related assumptions, parameters, data sources and key factors for baseline setting, which are listed in tabular format in Section B.1. (j) Taking into account of the uncertainty and using a conservative assumption from identified sources (see in brackets) with regard to the following parameters: electric	CAR 07	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	appropriate?	grid emission factor (2004 Netherlands Guidelines), heat production efficiency (Tool to determine the baseline efficiency of thermal or electric energy generation systems, Version 01), share of non-oxidized carbon in natural gas (National report on inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the 1990-2006) . (k) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure. (l) By drawing on the list of standard variables contained in appendix B to “Guidance on criteria for baseline setting and monitoring”. **CAR 07**. Baseline efficiency for thermal energy production is taken 87% as per Tool to determine the baseline efficiency of thermal or electric energy generation systems, Version 01 for old natural gas fired boiler (w/o condenser). Please justify appropriateness of this value for the main supplier of thermal energy for OJSC “Kazanorgsintez” – CHP-3 of Kazan city. Usually CHP have a higher efficiency for heat supply. Underestimation of the efficiency will result in overestimation of emission reduction.		
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?	N/A		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	Values of grid emission factor (GEF) are taken by default from "Operational Guidelines for Project Design Documents of Joint Implementation Projects. Volume 1: General guidelines. Version 2.3. Ministry of Economic Affairs of the Netherlands". 2004”. These values relate to Russia as a whole and take into account transportation and distribution losses. The project is implemented in the Republic of Tatarstan, which served by United Regional Energy System (URES) “Mid-Volga”. AIE determined in JI0192, JI0199, and JI223 higher grid emission factors for this URES based on the CTF study verified by BVC. Hence, emissions from electricity generation are estimated in the project in a conservative manner. AIE Note: European Bank for Reconstruction and Development published a Baseline Study Report for Russia (dated 09/09/2010, determined by TuV Sud) which predicts much lower values of grid emission factor for URES “Mid-Volga” (0,356-0,387 tCO2/MWh). Build emission factor is predicted on a very low level 0,187-0,224 tCO2/MWh, which is evidently inappropriate for thermal power plants. Details of the study are not available. AIE did not take this study into account.		OK
Approved CDM methodology approach only_Paragraphs 26(a) – 26(d)_Not applicable				
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	It is indicated that the “Tool for the demonstration and assessment of additionality” Version 05.2 (referred hereafter as Additionality Tool) was used. In accordance with paragraph (3) of the tool project		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario 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”.	proponents should “provide evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity. This evidence shall be based on (preferably official, legal and/or other corporate) documentation that was available at, or prior to, the start of the project activity”. Request for evidence of this “prior consideration” is made in CAR 02.		
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	The use of this approach is conditioned by its transparency and popularity in JI. A clear and transparent description of the steps in the Additionality Tool is provided.		OK
29 (b)	Are additionality proofs provided?	To prove additionality investment analysis of the project activity without JI registration, barrier analysis and common practice analysis were applied. Investment analysis is performed on excel spreadsheet made available to AIE, in terms of calculation of the project IRR and NPV and determining the economic attractiveness of the project without and with JI registration. The discount rate equal 14% was used with reference to OJSC "Kazanorgsintez" financial statements. The analysis	CAR 08 CAR 09	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		shows that for the used input data and without JI registration the project IRR is below the discount rate and NPV < 0. The sensitivity analysis of ±10% changes of energy costs gave the same results. The investment analysis is followed by analysis of financial and technological barriers. This analysis is superfluous as the investment analysis is applied. The project activity is stated to have been not the common practice in the Russian chemical industry. Search in Internet made by AIE did not reveal information about activities of the same scale, the same set of measures, in the same geographical area. All in all, a conclusion is made in PDD that “The implementation of the project will reduce greenhouse gas emissions into the environment that can not be achieved in the absence of the project. Any reduction in emissions of harmful substances into the environment, which will be achieved within the framework of the joint implementation project, will be an extra”. AIE regards this conclusion as the confirmation that the project is additional. **CAR 08.** Areas of concern as regards the investment analysis are as follows: (i) Please include in PDD and justify the used input data for the cost of electricity and heat in a manner that can be determined by the AIE; (ii) Please provide AIE factory data that would confirm the used input data for production volume in tons and specific energy consumption per ton of production in the baseline		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		and project activities; (iii) Please justify the appropriateness of the time horizon taken as the year 2012; that is 6 years from the last tranche of investments (25%); (iv) Please provide spreadsheet of sensitivity analysis. **CAR 09.** According to the Additionality Tool Sub-step 3a, the economic/financial barriers in Step 2 should not be included in the barrier analysis. Please correct accordingly.		
29 (c)	Is the additionality demonstrated appropriately as a result?	Conclusion is pending a response to CAR 07.	Pending	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	N/A		OK
Approved CDM methodology approach only_ Paragraphs 31(a) – 31(e)_Not applicable				
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?	The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are (i) under the control of the project participants, (ii) reasonably attributable to the project, and (iii) significant. These are: - Baseline CO_2 emissions from electricity and heat consumption in baseline scenario; - Project CO2 emissions from electricity and heat consumption in project activities.		OK
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the	Project boundary is defined on the basis of case-by-case assessment of different emission sources.		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?	**CAR 10.** Neither figure nor flow chart to delineate and justify the project boundary and the gases and sources is presented.	CAR 10	OK
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?	All gases and sources included are explicitly stated; refer to 32 (a) above. **CAR 11**. CH4 emissions are neglected though non-oxidised carbon in natural gas is taken 99,5% (the right reference is Revised 1996 IPCC Guidelines, Table 1.6). N2O emissions are neglected without justification.	CAR 11	OK
Approved CDM methodology approach only_Paragraph 33_ Not applicable				
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?	**CAR 12.** Please indicate if January 5, 2001 is the date on which the implementation or construction or real action of the project began.	CAR 12	OK
34 (a)	Is the starting date after the beginning of 2000?	Refer to 34 (a).		OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	Operational lifetime is defined as 20 years (240 months).		
34 (c)	Does the PDD state the length of the crediting period in years and months?	The length of crediting period is defined as 5 years (60 months).		OK
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?	Starting day is 01/01/2008 which is the date of the first emission reductions generated by the project.		OK
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 crediting period is defined as from 01/01/2008 till 31/12/2012.		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the operational lifetime of the project?			
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 separately for those until 2012 and those after 2012?	N/A		OK
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	It is explicitly indicated that a JI specific approach is chosen.		OK
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?	The monitoring plan describes: - data to be monitored (measured): amounts of electric and thermal energy consumed for production of particular product (refer to D.1.1.1) and volume of production of a particular product (refer to D.1.1.3); - the period in which they will be monitored: monthly; - all decisive factors for the control and reporting of project performance: information on the effect of the project on environment; quality control (QC) and quality assurance (QA) procedures; the operational and management structure that will be applied in implementing the monitoring plan.		OK
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?	The monitoring plan specifies the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions to be monitored.		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		For data to be monitored, please refer to 36(a) above. For constants please refer to the next paragraph.		
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?	Constants used are the default values of the parameters as follows: emission factor for natural gas, efficiency of heat production, grid emission factor, content of carbon in natural gas, fraction of non-oxidized carbon. The default values originate from recognized sources and are presented in a transparent manner. N/A for statistical analysis. Conclusion is pending a response to CAR 07	Pending	OK
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?	N/A		OK
36 (b) (ii)	For other values, − Does the monitoring plan clearly indicate the precise references from which these values are taken? − Is the conservativeness of the values provided justified?	The monitoring plan provides clearly indicates the precise references from which these default values are taken (National Inventory Report; "Operational Guidelines for Project Design Documents of Joint Implementation Projects. Volume 1: General guidelines. Version 2.3. Ministry of Economic Affairs of the Netherlands." 2004; Tool to determine the baseline efficiency of thermal or electric energy generation systems, Version 01). N/A for justification of conservativeness of the values.		OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Ex ante data are used.		OK
36 (b) (iv)	Are International System Unit (SI units) used?	International System Units (SI units) are used.		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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?	The monitoring plan notes parameters, coefficients, variables, etc. that are used to calculate baseline emissions based on monitored data of electricity and heat consumption and volume of production – all for a particular product.		OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	There is consistency between parameters, coefficients, variables, etc. used in baseline and monitoring plan.		OK
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”?	The monitoring plan draws on the list of standard variables contained in appendix B of “Guidance on criteria for baseline setting and monitoring”.		OK
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 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?	Description of the monitoring plan in Section D.1 explicitly and clearly distinguishes: (i) Refer to 36 (b). (ii) N/A. iii) Refer to 36 (a).		OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	Yes, the methods used (gas meters, electric meters, means for measuring the production volume), data collection frequency (monthly) and recording (electronic/paper) are clearly defined in the monitoring plan		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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?	These are Formulae: (1), 1.1), (1.1.1, (1.1.2) for project emissions, (2), 2.1), (2.1.1), (2.1.1.1), (2.1.2), (2.1.2.1), (2.1.2.2) for baseline emissions, (3) for emission reduction. **CAR 13.** Formulae in Section D.1.1.4 are arranged in a loose way which hampers their perception. Please correct.	CAR 13	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	The underlying rationale is self-evident and does not need explanation.		OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts etc. are used.		OK
36 (f) (iii)	Are all equations numbered?	Yes.		OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes.		OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	N/A		OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	N/A		OK
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?	There is consistency between the elaboration on the baseline scenario and calculating the baseline emission in the monitoring plan and on spreadsheet.		OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	Refer to 36 (f) (i).		OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Yes, the monitoring is in line with current operational routines.		OK
36 (f) (vii)	Are references provided as necessary?	N/A		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All key assumptions are explained in a transparent manner if needed.		OK
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?	N/A		OK
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?	The meters are recording the consumption of the natural gas and the generated electric energy continuously. The issue of uncertainty range and confidence interval is irrelevant for such measurements.		OK
36 (g)	Does the monitoring plan identify a national 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?	Monitoring plan refers to the federal laws “On environment protection, and “On environmental expertise”. **CAR 14**. Please provide the reference to national monitoring standard used for monitoring (measurements) routines.	CAR 14	OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	N/A		OK
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?	QC/QA procedures are outlined in PDD Section D.2. These are routine enterprise calibration procedures.		OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	The operational and management structure that the project participants(s) will implement in order to monitor emission reduction generated by the project is described in sufficient		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		detail in PDD Section D.4.		
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?	Monitoring techniques are in line with current operation routines at the enterprise.		OK
36 (l)	Does the monitoring plan provide, 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 but not including data that are calculated with equations?	A complete compilation of the data is provided in Annex 3.		OK
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?	It is indicated in section B.1 and Annex 3: “Data should be stored during the crediting period and another for 2 years after the last accrual of ERUs”.		OK
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?	N/A		OK
Approved CDM methodology approach only_Paragraphs 38(a) – 38(d)_Not applicable				
Applicable to both JI specific approach and approved CDM methodology approach_Paragraph 39_Not applicable				
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an	Leakage is conservatively neglected.		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?			
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	N/A		OK
Approved CDM methodology approach only_Paragraph 41_Not applicable				
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 in the baseline scenario and in the project scenario is chosen.		OK
43	If the approach (a) in 42 is chosen, does 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?	PDD provides ex ante estimates of: (a) Emissions for the project scenario (Section E.1); (b) Leakage (Section E.2); (c) Emissions for the baseline scenario (Section E.4); (d) Emission reductions adjusted by leakage (Section E.6).		OK
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		OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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 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?	(i) Estimates in 43 are given on the periodic basis, from the beginning until the end of the crediting period, in tones of CO2 equivalent, on a source-by-source basis, for each GHG. (ii) The formulae used in PDD are consistent. (iii) Key factors influencing the baseline emissions and the activity level of the project and the project emissions are taken into account, as appropriate. (iv) Data sources used for calculating the estimates are clearly identified, reliable and transparent. (v) Default values of natural gas emission factor, grid emission factor, and efficiency of heat production are taken from identified sources. Refer to CAR 07. (vi) Estimation in 43 is based on conservative assumptions and the most plausible scenario in a transparent manner. (vii) Estimates in 43 are consistent throughout the PDD. (viii) The annual average of estimated emission reductions calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve. Conclusion is pending a response to CAR 07.	Pending	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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 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?	Illustrative ex-ante estimation of emission reduction is made on the excel spreadsheet made available to AIE. No calculation errors were observed with a reservation concerning CAR 07. **CAR 15**. Estimates should be given for each source of emissions: consumption of electric energy and heat energy.	CAR 15	OK
Approved CDM methodology approach only_Paragraphs 47(a) – 47(b)_Not applicable				
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?	PDD Section F.1 explains that the project reduces environmental impact of OJSC “Kazanorgsintez” activities outside the project site through reduction of fuel consumption at grid power plants. PDD Section 2 refers to, and provides excerpts from, an explanatory note on "Environmental Impact Assessment (EIA) "OJSC Kazanorgsintez” with regard to the existing, renovated and newly productions.	CAR 16	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		The project has no transboundary impacts. **CAR 16.** Please provide a complete reference to Project Documentation with analysis of environmental impact of the project carried out in accordance with procedures as determined by the host Party.		
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?	N/A.		OK
Stakeholder consultation				
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?	Stakeholder consultation is not required by the Russian legislation.		OK
Determination regarding small-scale projects (additional elements for assessment)_Paragraphs 50 - 57_Not applicable				
Determination regarding land use, land-use change and forestry projects _Paragraphs 58 – 64(d)_Not applicable				
Determination regarding programmes of activities_Paragraphs 66 – 73_Not applicable				

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. Footnote 1 relates to CDM and hence is inadequate.	-	Response 1 In PDD version 04 reference was changed.	Response 1 is accepted CAR is closed based on due amendments made to PDD.
CAR 02. The history of the project’s JI component is not summarised. There is no reference to any event at which a decision to implement the modernisation programme with the use of the JI mechanism was made. Please make it transparent if at the 2000 meeting of Technical Council of OJSC "Kazanorgsintez" the whole modernisation programme worth 111 MEuro was approved or just its part started in 2000 (72% total investments). If the latter is true please provide evidence that the parts of the programme started throughout 2002-2008 were approved as JI project.	-	Response 1 In section A.2 PDD version 04 were amended accordingly. Response 2 The protocol of technical meeting is provided	Response 1 s not accepted. Please provide the AIE and refer in PDD to documented evidence that the 2000 meeting of Technical Council and "Energy Saving Program in 2000-2005" addressed the JI mechanism. CAR is not closed. Response 2 is accepted CAR is closed based on due amendments made to PDD and the information provided to the AIE..

CAR 03. It is not indicated in Section A.3 that Russian Federation is the Host Party.	-	Response 1 In section A.3 PDD version 04 were amended accordingly.	Response 1 is accepted CAR is closed based on due amendments made to PDD.
CAR 04. Please provide information allowing unique identification of the project, for instance geographical coordinates.	-	Response 1 In section A.4.1.4 PDD version 04 were added geographical coordinates of the project. Response 2 In PDD v 5 were added reference.	Response 1is not accepted. Please provide a reference to the source of the geographical coordinates. CAR is not closed. Response 2 is accepted. CAR is closed based on due amendments made to PDD.

CAR 05. According to the investment analysis seven sub-activities were not invested and implemented. As a result total investment is 105 rather than 111 ME. Please correct Sections A.4.2, B.1 and B.2 accordingly.	-	Response 1 In the PDD version 01 were made some inaccuracies, in sections A.4.2, B.1 and B.2 of the PDD version 04 were amended accordingly. Response 2 In the initial version of the PDD was a mistake. Were not taken into account all activities. In PDD v 05 were amended in accordance with the final data provided by the company. In PDD v 5 were added column with coded activities.	Response 1 is not accepted. The new investment is 175 ME or about 65% higher than in the original investment analysis. Please explain the origin of the difference. Please include in Table on pp 34-35 a column with indication of coded names of the documents which were provided to the AIE as a documented evidence of the investment cost for each activity. CAR is not closed. Response 2 is accepted. CAR is closed based on due amendments made to PDD.

CAR 06. The project has no written approvals by the Parties involved.	19	Response 1 The project approval by the Host Party will be provided after the determination statement is issued by the AIE. Response 2 Written approval of the Party involved, other than Russian Federation, is coming till June 10, 2011 Response 3 Section A.5 PDD v 07 were amended accordingly.	Pending Please indicate when the approval of the Party involved other than Russian Federation will be obtained. Response 2 is not accepted. Please explicitly indicate in PDD Section A.5 the status of the approval of the Party involved other than Russian Federation. CAR is not closed. Response 3 is accepted. CAR is closed based on due amendments made to PDD.

CAR 07. Baseline efficiency for thermal energy production is taken 87% as per Tool to determine the baseline efficiency of thermal or electric energy generation systems, Version 01 for old natural gas fired boiler (w/o condenser). Please justify appropriateness of this value for the main supplier of thermal energy for OJSC "Kazanorgsintez" – CHP-3 of Kazan city. Usually CHP have a higher efficiency for heat supply. Underestimation of the efficiency will result in overestimation of emission reduction.	23	Response 1 CHP-3 of Kazan city and OJSC "Kazanorgsintez" are different legal entities, so to get accurate information about the effectiveness of heat production in CHP-3 causes some difficulty.CHP-3 of Kazan comprehends to the JSC "Tatenergo" holding. CHP-3 was put by fuel oil in 1967. In mid-1970 at the CHP-3 was the transition to natural gas. In accordance with the information provided on the official website of the JSC "Tatenergo" holding (http://www.tatenergo.ru/75/objects_gencom_ktec3.html), the main tasks of CHP-3, on the last decades, is the automation of processes and complex rehandling of industrial wastewater. Based on the foregoing, this option was chosen in accordance with the "Tool to determine the baseline efficiency of thermal or electric energy generation systems", Version 01. Response 2 CHP-3 of Kazan city and OJSC "Kazanorgsintez" are different legal entities, CHP-3 is not the participant of the project.	Response 1 is not accepted No proof is provided. CAR is not closed. Response 2 is not accepted. AIE comments: (i) At the lack of information the conservative results for baseline can be provided by using KPD = 100%. (ii) According to data in AIE possession, the specific fuel rate for heat production at Kazan TEZ-3 calculated by the methodology accepted in the power industry, KPD>100% (b = 134 kg.u.t/Gcal in 2007). (iii) KPD= 87% that was taken in PDD corresponds to the recommendation of the indicated CDM Tool for "Old natural gas fired boiler (w/o condenser)". (iv) As heat production at TEZ is basically more effective than at boilers, PDD developer should have considered another recommendation of the Tool: KPD=92% for "New

		Statistical and factual data on the efficiency of thermal power generation CHP-3 has not free access So, according with the requirements of “Guidance on criteria for baseline setting and monitoring (Version 02)” for the determination of this parameter was used “Tool to determine the baseline efficiency of thermal or electric energy generation systems” (Version 01). According with the “Tool to determine the baseline efficiency of thermal or electric energy generation systems (Version 01), if project participants can not determine the energy value it is allowed to use the default values listed in the Table 1. Since, CHP-3 works on natural gas more than 30 years, this parameter was chosen according to “Old natural gas fired boiler (w/o condenser)". Response 3 Note is taken into account. KPD = 92% for "New natural gas fired boiler (w / o condenser)". Corresponding changes were made in the calculations.	natural gas fired boiler (w/o condenser)”. (v) The use of options (i) or (iv) seems to be justified. CAR is not closed. <u>Response 3 is accepted.</u> CAR is closed based on due amendments made to PDD.
CAR 08. Areas of concern as regards the investment analysis are as follows: (i) Please include in PDD and justify the used input data for the cost of electricity and heat in a manner that can be determined by the AIE;	29(b)	Response 1 Input data for the cost of electricity reflected in the financial model of the project (i) Data verification granted by “Help on	<u>Acceptability of Response 1</u> (i) Response is not accepted. “Help on energy cost” is not found. Please provide references to the source of

(ii) Please provide AIE factory data that would confirm the used input data for production volume in tons and specific energy consumption per ton of production in the baseline and project activities; (iii) Please justify the appropriateness of the time horizon taken as the year 2012; that is 6 years from the last tranche of investments (25%); (iv) Please provide spreadsheet of sensitivity analysis.		energy cost”. (ii) Factory data were provided; (iii) Project investment analysis was conducted until the end of the Kyoto Protocol commitments. To avoid errors in investment analysis were crested the calculation of equipment liquidation value in the last year of the Kyoto Protocol commitment; Spreadsheet of sensitivity analysis was provided Response 2 Input data for the cost of electricity reflected in the financial model of the project (i) In section PDD version 05 was amended accordingly Response 3 Data on the cost of energy is provided Response 4 Data is provided. Data is amended in accordance with the remarks.	electric energy and thermal energy tariffs in the insert Стоимость Энергоресурсов of the excel sheet with investment analysis and in the document provided separately . (ii) Response is accepted. (iii) Response is accepted. (iv) Response is accepted. CAR is not closed. <u>Response 3 is not accepted</u> The AIE received a table Стоимость Энергоресурсов  D:\Мои документы_Kyoto\SIC Global\Re without signs of control (date, signature, position of the signatory). No references to the source of electric energy and thermal energy tariffs is provided (for instance copy of the contract for supply of electricity and heat). CAR is not closed. <u>Response 4 is accepted.</u> CAR is closed based on due

			amendments made to PDD.
CAR 09. According to the Additionality Tool Sub-step 3a, the economic/financial barriers in Step 2 should not be included in the barrier analysis. Please correct accordingly.	29(b)	Response 1 PDD version 04 was amended accordingly Response 2 PDD version 05 was amended accordingly. Response 3 PDD version 06 was amended accordingly. Response 4 "Kazanorgsintez" OJSC acts in accordance with the provisions of the Statute of the open joint-stock company (OJSC). (http://www.kazanorgsintez.ru/index.php?page=content&id=69) In accordance with the provisions of the Statute of "Kazanorgsintez" OJSC (art. 14) the authority executives of the joint-stock company are: -The General Meeting of Shareholders -The Board of Directors -The Sole executive Authority -The Collective executive Authority The Chairman of the Board of Directors is Albert K. Shigabutdinov, the General Director	Response 1 is not accepted. Due corrections are not made (refer to the quotation from PDD). The project was financed, hence it alleviated the financial barriers without the JI help. PDD Page 37 1. Financial barriers The project activity is not financially attractive without the use of joint implementation. Implementation of this project requires a large-scale modernization of the enterprise and financial investments. Financial condition of the enterprise cannot achieve the planned activities for modernization without attracting credit resources of Russian banks, which is unprofitable because of high interest rates. CAR is not closed. Response 2 is not accepted. According to CDM **GUIDELINES FOR OBJECTIVE DEMONSTRATION AND ASSESSMENT OF BARRIERS (Version 01)** “Barriers that can be mitigated by additional financial means can be quantified and represented as costs and should not be identified as a barrier for implementation of project while

		of “TAIF” OJSC. The Board of Directors includes the Top Management of “TAIF”OJSC http://www.kazanorgsintez.ru/index.php?page=content&id=43 In accordance with the provisions of Statute of "Kazanorgsintez" OJSC (the art. 16) the competence of the Board of Directors inter alia includes the following: -The Board of Directors is responsible for general management of Company except of issues relegated to the responsibility of the General Shareholders Meeting under provisions of the current legislation of Russian Federation and the current Statute of Company. The main objectives of the Board of Directors are to ensure maximum profitability and to increase the assets of the Company, to protect rights and legal interests of shareholders of the Company, to implement permanent control over the executive authorities of the Company and to assistance in fixing of corporate conflicts. - to identify of priority activities of the Company , including approval of annual and quarterly budgets. - to use reserve fund and other funds of the Company .	conducting the barrier analysis, but rather should be considered in the framework of investment analysis”. CAR is not closed. Response 3 is not accepted. CAR will be closed if the statement in the PDD Section B.2 page 37 (see below) will be validated by OJSC "Kazanorgsintez" (for instance by a letter). “OJSC "Kazanorgsintez" enters the group of companies OJSC "TAIF" and has no right to freely dispose of financial resources without the consent of the planned investments with the OJSC "TAIF" executives, i.e. the executives of OJSC "Kazanorgsintez" have limited access to capital. Only the possibility of obtaining funds from the sale of emission reduction units generated by the project, will convince the executives of OJSC "TAIF" accomplish the planned project activities in full. CAR is not closed. Response 4 is accepted. CAR is closed based on due amendments made to PDD.

CAR 10. Neither figure nor flow chart to delineate and justify the project boundary and the gases and sources is presented.	32(c)	Response 1 Project boundary flow chart was added to the section B.3 PDD version 04.	Response 1 is accepted CAR is closed based on due amendments made to PDD.
CAR 11. CH4 emissions are neglected though non-oxidised carbon in natural gas is taken 99,5% (the right reference is Revised 1996 IPCC Guidelines, Table 1.6). N2O emissions are neglected without justification.	32(d)	Response 1 The conservative approach was used in the project in order to determine the greenhouse gas emissions, whereby CH4 and N2O emissions are neglected through fossil fuels and do not used in calculations. B.3 PDD version 04 was amended accordingly.	Response 1 is accepted CAR is closed based on due amendments made to PDD.
CAR 12. Please indicate if January 5, 2001 is the date on which the implementation or construction or real action of the project began.	34(a)	Response 1 In section C.1 PDD version 04 was added relevant information	Response 1 is accepted CAR is closed based on due amendments made to PDD.
CAR 13. Formulae in Section D.1.1.4 are arranged in a loose way which hampers their perception. Please correct.	36(f)	Response 1 PDD version 04 was amended.	Response 1 is accepted CAR is closed based on due amendments made to PDD.
CAR 14. Please provide the reference to national monitoring standard used for monitoring (measurements) routines.	36(g)	Response 1 In section D.1.5 PDD version 04 was added appropriate reference Response 2 In section D.3 PDD version 05 was amended accordingly Response 3	Response 1 is not accepted. Please refer to the FZ-102 "On Uniformity of Measurements". It directly relates to monitoring. CAR is not closed Response 2 is not accepted Please indicate by yellow in PDD what was added/corrected.

		The changes were indicated in the PDD version 06	CAR is not closed. Response 3 is accepted CAR is closed based on due amendments made to PDD.
CAR 15. Estimates should be given for each source of emissions: consumption of electric energy and heat energy.	46	Response 1 In section E PDD version 04 was amended accordingly.	Response 1 is accepted CAR is closed based on due amendments made to PDD.
CAR 16. Please provide a complete reference to Project Documentation with analysis of environmental impact of the project carried out in accordance with procedures as determined by the host Party.	48(a)	Unfortunately, it is impossible to provide Project Documentation reference, because there is no free access to the electronic form. The printed version of this document is stored at the OJSC "Kazanorgsintez". Response 2 The changes are made in the D. 1.5 PDD version 06. The following documents are provided: - Excerpt from EIA; - acts of state examination of performed within the project activities; - emission permits. Response 3 Section F.1 PDD v 07 was amended accordingly.	Response 1 is not accepted. Please provide reference (not electronic) to the following documents: - Environment Protection volume of the Project Design, - State expertise conclusion, if any - Permits for Air Emissions. CAR is not closed. Response 2 is not accepted Please provide references in Section F.1 to the EIA, Air Emission Permits, and GlavGosExpertise conclusions. CAR is not closed. Response 3 is accepted. CAR is closed based on due amendments made to PDD.