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VERITAS

VERIFICATION REPORT RWE POWER AG

VERIFICATION OF THE REDUCTION OF GREENHOUSE GASES EMISSIONS DUE TO ENERGY EFFICIENCY IMPROVEMENTS AND WASTE HEAT UTILIZATION AT JSC “UKRGRAFIT”

REPORT No. UKRAINE-VER/0727/2012

REVISION No. 01

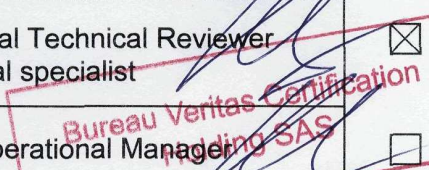
BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

Date of first issue: 20/12/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: RWE Power AG	Client ref.: Antonio Aguilera
<p>Summary:</p> <p>Bureau Veritas Certification has made the initial and the first periodic verification of the project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit", JI Registration Reference Number UA1000399, project of the RWE Power AG located in Zaporizhzhya, Ukraine, and applying JI specific approach, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria 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.</p> <p>The verification scope is defined as a periodic independent review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the monitoring report against project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.</p> <p>The first output of the verification process is a list of Clarification, Corrective Action Requests, Forward Action Requests (CL, CAR and FAR), presented in Appendix A.</p> <p>In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 85 671 tonnes of CO2 equivalent for the monitoring period from 01/01/2008 to 30/11/2012, distributed as follows: 8 705 tonnes of CO2 equivalent in 2008; 8 661 tonnes of CO2 equivalent in 2009; 10 318 tonnes of CO2 equivalent in 2010; 25 448 tonnes of CO2 equivalent in 2011; and 32 539 tonnes of CO2 equivalent for the period January – November 2012.</p> <p>Our opinion relates to the project GHG emissions and resulting GHG emission reductions reported and related to the approved project baseline and monitoring, and its associated documents.</p>	

Report No.: UKRAINE-ver/0727/2012	Subject Group: JI
Project title: "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit"	
Work carried out by: Olena Manziuk – Team Leader, Lead Verifier Igor Alekseenko - Team Member, Technical specialist	
Work reviewed by: Ivan Sokolov – Internal Technical Reviewer Oleg Papu - Technical specialist	
Work approved by: Ivan Sokolov - the Operational Manager	
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1 INTRODUCTION

RWE Power AG has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC “Ukrgrafit” (hereafter called “the project”) at Zaporizhzhya city, Ukraine.

This report summarizes the findings of the verification of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

Verification is the periodic independent review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period.

The objective of verification can be divided in Initial Verification and Periodic Verification.

UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

1.2 Scope

The verification scope is defined as an independent and objective review of submitted monitoring report and the determined project design document including 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 verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3 Verification Team

The verification team consists of the following personnel:

Olena Manziuk

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Igor Alekseenko

Bureau Veritas Certification Climate Change Technical specialist



This verification report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

Oleg Papu
Bureau Veritas Certification Technical specialist

2 METHODOLOGY

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

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

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

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

2.1 Review of Documents

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

The verification findings presented in this report relate to the Monitoring Report (MR) version 1.1 dated 15/10/2012, the MR version 1.2 dated 05/11/2012, the MR version 2.0 dated 12/12/2012 and project as described in the determined PDD.

The Monitoring Report version 2.0 dated 12/12/2012 is deemed final.



2.2 Follow-up Interviews

On 15/11/2012 Bureau Veritas Certification during site visit performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of LLC 'KT-Energy' and JSC "Ukrgrafit" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
JSC "Ukrgrafit"	<ul style="list-style-type: none"> ➤ Organizational structure ➤ Responsibilities and authorities ➤ Training of personnel ➤ Quality management procedures and technology ➤ Implementation of equipment (records) ➤ Metering equipment control ➤ Metering record keeping system, database ➤ Monitoring procedure
LLC 'KT-Energy'	<ul style="list-style-type: none"> ➤ Baseline methodology ➤ Monitoring plan ➤ Monitoring report ➤ Deviations from PDD ➤ Emission reduction calculation

2.3 Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the verification is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the GHG emission reduction calculation.

If the Verification Team, in assessing the monitoring report and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to the monitoring requirements, it should raise these issues and inform the project participants of these issues in the form of:

(a) Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;

(b) Clarification request (CL), requesting the project participants to provide additional information for the Verification Team to assess compliance with the monitoring plan;



(c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

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

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

3 VERIFICATION CONCLUSIONS

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in three Corrective Action Requests and one Clarification Requests. No Forward Action Request was raised.

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

3.1 Remaining issues and FARs from previous verifications

No Forward Action Requests from previous verifications were raised by verification team. Thus, the following section is not applicable.

3.2 Project approval by Parties involved (90-91)

Written project approval by Germany, other than the host Party, has been issued by the DFP of that Party when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest. RWE Power AG has issued the Letter of Approval dated 31/01/2012 for this project from the Federal Environment Agency acting as the Designated Focal Point of that Party (refer to the section 5 References of this report).

Written project approval (LoA # 3604/23/7 dated 13/12/2011) by the host Party (Ukraine) has been issued by the State Environmental Investment Agency of Ukraine.



The abovementioned written approval is unconditional.

3.3 Project implementation (92-93)

The purpose of the project is reduction of greenhouse gases emissions from coal and natural gas combustion, as well as electricity consumption at JSC "Ukrgrafit".

According to the PDD, the JI project activity involves installation of three exhaust boilers for waste energy utilization from carbon fillers calcination furnaces and thus substitution of heat energy (steam), which would have been generated by coal fired boilers in the absence of the project activity. Besides, the project foresees reduction in energy resources consumption, such as electricity and natural gas, due to reconstruction of calcination furnaces, electrocalcinators and other energy-efficiency improvement measures.

Regarded project reduces the anthropogenic emissions of GHGs through the decline in coal combustion for heat energy generation, decrease in natural gas combustion and electricity consumption for production needs. Before project implementation, JSC 'Ukrgrafit' has been covering its heat (steam) energy demand by purchasing heat power from the nearby industrial enterprise and was using relatively higher quantities of energy for operational processes without implementation of energy efficiency measures.

During the monitoring period 01/01/2008 – 30/11/2012 the project was operational and generating emission reductions. The project activity implementation was begun on 31/10/2006. It is the date when the exploitation of the first reconstructed electrocalcinators has been started. The reconstruction of the kiln has been ended in 2007 and the kiln started operation in 2008. Exhaust boiler have started operation in May, 2011. All dates of the project activity implementation are justified with the JSC "Ukrgrafit" documents, and these documents were reviewed by the verification team during the site visit. Concluding, implementation of the energy saving measures is realized mainly according to the registered project design document.

Based on the final PDD and supported documented evidences, the starting date of JI project crediting period is 01/01/2008.

Thus, JSC "Ukrgrafit" executes the project of exhaust boilers installation, reconstruction of electrocalcinators and the kiln, and electrode fillers graphitizing modernization to reduce GHG emissions, organic fuel and electricity consumption.



As a fact, the JI specific approach was used for JI project realization that developed in accordance with Guidance on Criteria for Baseline Setting and Monitoring.

The Monitoring Report states that the amount of the emission reductions (ER) achieved due to the JI project activity implementation for the monitoring period 01/01/2008 – 30/11/2012 is equal 85 671 tonnes CO₂ equivalent.

Within the regarded monitoring period there are no deviations or revisions to the determined PDD as well as the monitoring plan.

The identified areas of concern as to the project implementation, project participants response and BV Certification's conclusion are described in Appendix A (refer to CL01).

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

The monitoring occurred in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website.

According to the PDD, selection of monitoring approach was made in compliance with "Guidance on criteria for baseline setting and monitoring". The project developer used JI specific approach for establishing the monitoring. Collection of all key parameters required to calculate greenhouse gas emissions is undertaken in compliance with the established practice of JSC "Ukrgrafit" to meter fuel, heat, energy, pollutant emissions into the air, and environmental impact assessment, etc.

For calculating the emission reductions key factors, such as Production volumes by calcination kiln, Carbon dioxide emission factor for combustion of natural gas, Net calorific value for natural gas, Production of thermoanthracite by reconstructed electrocalcinators, Production of synthetic graphite by reconstructed electrocalcinators, Production volumes by graphitizing furnaces, Heat energy generation, Specific carbon dioxide non-direct emissions factor for consumption of electricity generated by power stations of united energy system of Ukraine, Natural gas consumption by the kiln in the project scenario, Electricity consumption for production, Supplementary consumption of fossil fuel (natural gas) by the exhaust boilers for heat energy generation, etc. influencing the baseline emissions and the activity level of the project and the emission reductions as well as risks associated with the project were taken into account, as appropriate.



Data sources used for calculating emission reductions, such as calibrated measurement equipment, the study of standardized emission factors for the Ukrainian electricity grid, IPCC guidelines, the plant reporting documents are clearly identified, reliable and transparent. On site responsible persons register data from the measurement equipments and fixed monitoring data to logbooks. Also, some monitoring parameters are recorded by the automated control system. All documented evidences (data sources) are archived in the paper and electronic basis. Registration of monitoring data at the JSC "Ukrgrafit" is conducted in accordance with identified procedure of data collection. For example, responsible operators of the electrocalcinators workshop and the kiln workshop transfer the collected monitoring data to Electricity consumption accounting group (workshop #9) that prepares technical reports. Data from the graphitizing furnaces workshop and boilers workshop are monitored by the automated control system. The responsible for greenhouse gases emission reductions monitoring is the Head of marketing department of JSC "Ukrgrafit". So, JI project monitoring data of four workshops are transferred to the Head of marketing department of the plant on a monthly basis. Periodic monitoring reports with calculations of greenhouse emission reductions are to be prepared by LLC "KT-Energy" (Kyiv).

Emission factors, including default emission factors, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. According to the JI project documents, several emission factors are used for calculation of emission reductions, such as Carbon dioxide emission factor for combustion of natural gas, Carbon dioxide emission factor for combustion of graphite powder, Carbon dioxide emission factor for combustion of other bituminous coal, and Specific carbon dioxide non direct emissions factor for consumption of electricity generated by power stations of united energy system of Ukraine.

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

The relevant threshold to be classified as JI SSC project was not exceeded during any monitoring period on an annual average basis.

The identified areas of concern as to compliance of the monitoring plan with the monitoring methodology, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR01 and CAR02).

3.5 Revision of monitoring plan (99-100)

There are no revisions to the Monitoring Plan of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements



and Waste Heat Utilization at JSC “Ukrgrafit”. Thus, the section is not applicable for considered monitoring period.

3.6 Data management (101)

As a result of documents revision, site visit, and verification process at all there is concluded that the data and their sources, provided in monitoring report, are clearly identified, reliable and transparent.

The implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures. For instance, double checking of the monitoring parameters is conducted by the specialists of JSC “Ukrgrafit”. These procedures are described in detailed in the registered project design document.

According to the documents on measurement equipments and its calibration certificates, the function of the monitoring equipment, including its calibration status, is in order. Frequency of calibration of each device is set by documents of measurement equipment. Verification team confirms that devices are calibrated with established frequency, and the calibration procedure at JSC “Ukrgrafit” is in compliance with national requirements. Calibration status of all measurement equipment was justified with special documented evidences (see section 5 References) covering the whole monitoring period (i.e., the monitoring period from 01/01/2008 to 30/11/2012).

During the site visit the monitoring procedure was revised, the reporting documents and electronic database were checked and they were discovered as reliable and functional. Thus, the evidence and records used for the monitoring are maintained in a traceable manner.

The data collection and management system for the JI project “Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC “Ukrgrafit” is in accordance with the monitoring plan.

The identified areas of concern as to the data management, project participants response and BV Certification’s conclusion are described in Appendix A (refer to CAR03).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.



4 VERIFICATION OPINION

Bureau Veritas Certification has performed the initial and the first periodic verification of the JI project “Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC “Ukrgrafit”” in Ukraine, which applies JI specific approach. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The verification consisted of the following three phases: i) desk review of the monitoring report against the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The management of RWE Power AG is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring Plan indicated in the final PDD version 2.2 dated 07/11/2011. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 2.0 dated 12/12/2012 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

Bureau Veritas Certification can confirm that the GHG emission reduction is accurately calculated and is free of material errors, omissions, or misstatements. Our opinion relates to the project’s GHG emissions and resulting GHG emissions reductions reported and related to the approved project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated, we confirm, with a reasonable level of assurance, the following statement:

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

Baseline emissions	: 29 609	tonnes of CO ₂ equivalent
Project emissions	: 20 904	tonnes of CO ₂ equivalent
Emission Reductions (year 2008)	: 8 705	tonnes of CO ₂ equivalent



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Reporting period: From 01/01/2009 to 31/12/2009

Baseline emissions	: 35 341	tonnes of CO ₂ equivalent
Project emissions	: 26 680	tonnes of CO ₂ equivalent
Emission Reductions (year 2009)	: 8 661	tonnes of CO ₂ equivalent

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

Baseline emissions	: 39 259	tonnes of CO ₂ equivalent
Project emissions	: 28 941	tonnes of CO ₂ equivalent
Emission Reductions (year 2010)	: 10 318	tonnes of CO ₂ equivalent

Reporting period: From 01/01/2011 to 31/12/2011

Baseline emissions	: 55 142	tonnes of CO ₂ equivalent
Project emissions	: 29 694	tonnes of CO ₂ equivalent
Emission Reductions (year 2011)	: 25 448	tonnes of CO ₂ equivalent

Reporting period: From 01/01/2012 to 30/11/2012

Baseline emissions	: 62 881	tonnes of CO ₂ equivalent
Project emissions	: 30 342	tonnes of CO ₂ equivalent
Emission Reductions (January – November 2012)	: 32 539	tonnes of CO ₂ equivalent

Total amount of emission reductions achieved due to the JI project implementation for the whole monitoring period 01/01/2008 – 30/11/2012 is 85 671 tonnes CO₂ equivalent.



5 REFERENCES

Category 1 Documents:

Documents provided by RWE Power AG that relate directly to the GHG components of the project.

- /1/ Monitoring report of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit" version 1.1 dated 15/10/2012
- /2/ Monitoring report of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit" version 1.2 dated 05/11/2012
- /3/ Monitoring report of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit" version 2.0 dated 12/12/2012
- /4/ Project Design Document of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit" version 2.2 dated 07/11/2011
- /5/ Letter of Approval # 3604/23/7 dated 13/12/2011 of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit" issued by the State Environmental Investment Agency of Ukraine
- /6/ Letter of Approval dated 31/01/2012 of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit" issued by Federal Environment Agency, German Emissions Trading Authority
- /7/ Determination Report No. UKRAINE-det/0228/2011 dated 10/11/2011 and issued by BVCH

Category 2 Documents:

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

- /1/ Agreement # 206M dated 27/12/2011 between JSC "Ukrgrafit" and Zaporizhzhzia Scientific and Production Centre for Standardization, Metrology and Certification
- /2/ Annex to Agreement # 206M dated 27/12/2011. List of measurement equipment in operation to be calibrated in 2012.



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- Metering of substance flow, consumption, level and volume parameters
- /3/ Annex to Agreement # 206M dated 27/12/2011. List of measurement equipment in operation to be calibrated in 2012. Metering of electric and magnetic values, radiotechnical and radioelectronic measurements
 - /4/ Calibration schedule dated 22/11/2011 of electric measurement equipment at shop # 2 (production line 1) for 2012
 - /5/ Calibration schedule dated 30/11/2011 of electric measurement equipment at shop # 9 for 2012
 - /6/ Calibration schedule dated 19/10/2011 of substances consumption measurement equipment at shop # 8 for 2012
 - /7/ Calibration schedule dated 17/10/2011 of substances volume measurement equipment at shop # 3 for 2012
 - /8/ Calibration schedule dated 13/12/2011 of measurement equipment at shop # 8 (site 8016 – utilization boiler-house) for 2012
 - /9/ Information dated 22/10/2012 on measurement equipment within JI project
 - /10/ Regime card on measurement equipment, fabrication # 10439904. Last calibration date – 18/05/2012
 - /11/ Regime card on measurement equipment, fabrication # 10442903. Last calibration date – 26/06/2012
 - /12/ Regime card on measurement equipment, fabrication # 12540724. Last calibration date – 26/07/2012
 - /13/ Passport on gas meter, fabrication # 69826. Last calibration date – 15/08/2012
 - /14/ Statement on acceptance and packaging of equipment, fabrication # 03023819. Last calibration date – 26/10/2011
 - /15/ Statement on acceptance and packaging of equipment, fabrication # 04011035. Last calibration date – 22/08/2006
 - /16/ Statement on acceptance and packaging of equipment, fabrication # 04010372. Last calibration date – 30/03/2006
 - /17/ Statement on acceptance and packaging of equipment, fabrication # 04010370. Last calibration date – 30/03/2006
 - /18/ Statement on acceptance and packaging of equipment, fabrication # 04010369. Last calibration date – 30/03/2006
 - /19/ Statement on acceptance and packaging of equipment, fabrication # 04011229. Last calibration date – 12/12/2006
 - /20/ Calibration protocol # 12112 dated 28/08/2012 on active (reactive) power meter, fabrication # 04011035
 - /21/ Calibration protocol # 12055 dated 21/03/2012 on active (reactive) power meter, fabrication # 04010369
 - /22/ Calibration protocol # 12054 dated 21/03/2012 on active (reactive) power meter, fabrication # 04010370
 - /23/ Passport on gas meter, fabrication # 5069. Last calibration date – 17/03/2011
 - /24/ Calibration protocol # 12082 dated 17/05/2012 on active (reactive)



- power meter, fabrication # 04010372
- /25/ Regime card on measurement equipment, fabrication # 001002444.
Last calibration date – 22/06/2012
 - /26/ Regime card on measurement equipment, fabrication # 101000554.
Last calibration date – 08/05/2012
 - /27/ Order # 523a dated 29/11/2007 on implementation of ERUs monitoring system. Annex # 1. Monitoring procedure within JI project “Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC “Ukrgrafit” version 1.0 dated 29/11/2007
 - /28/ Extract from the protocol # 19 on annual meeting of JSC “Ukrgrafit” shareholders
 - /29/ Certificate Series AA # 554252 dated 26/04/2012 from Unified State Register of Legal Entities and Individual Entrepreneurs of Ukraine – PJSC “Ukrgrafit”
 - /30/ Extract AAB # 497556 dated 26/04/2012 from the Unified State Register of Legal Entities and Individual Entrepreneurs – PJSC “Ukrgrafit”
 - /31/ Certificate # 1504 from the Unified State Register of Legal Entities and Individual Entrepreneurs – PJSC “Ukrgrafit”
 - /32/ Letter # 28-247 dated 15/12/2010 from JSC “Ukrgrafit” to the National Environmental Investment Agency of Ukraine
 - /33/ Inventory cards of general accounting of main equipment, JSC “Ukrgrafit”
 - /34/ Inventory card on accounting of intellectual property item within non-material assets (three-dimensional model of graphitation furnace thermal condition)
 - /35/ Inventory card dated 29/12/2011 of general accounting of main equipment (steam boiler, fabrication # 167)
 - /36/ Inventory card dated 05/08/2011 of general accounting of main equipment (fabrication # 167)
 - /37/ Inventory card dated 29/12/2011 of general accounting of main equipment (steam boiler, fabrication # 169)
 - /38/ Inventory card dated 05/08/2011 of general accounting of main equipment (fabrication # 169)
 - /39/ Inventory card dated 29/12/2011 of general accounting of main equipment (steam boiler, fabrication # 168)
 - /40/ Inventory card dated 05/08/2011 of general accounting of main equipment (fabrication # 168)
 - /41/ Acceptance-transmitting statement # M102 dated 21/12/2007 on repaired, reconstructed and upgraded equipment (furnace # 10)
 - /42/ Acceptance-transmitting statement # M161 dated 15/12/2011 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 1)
 - /43/ Acceptance-transmitting statement # M049 dated 12/12/2007 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 2)



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- /44/ Acceptance-transmitting statement # M060 dated 30/06/2011 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 3)
- /45/ Acceptance-transmitting statement # M062 dated 30/06/2011 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 4)
- /46/ Acceptance-transmitting statement # M039 dated 30/04/2009 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 5)
- /47/ Acceptance-transmitting statement # M035 dated 30/04/2009 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 5)
- /48/ Acceptance-transmitting statement # M037 dated 30/04/2009 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 5)
- /49/ Acceptance-transmitting statement # M002 dated 12/02/2007 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 7)
- /50/ Acceptance-transmitting statement # M004 dated 03/12/2007 on repaired, reconstructed and upgraded equipment (ИЭТ-10 electric calcination unit # 7)
- /51/ Protocol # 110 dated 04/11/2010 of commission session on health and safety knowledge testing
- /52/ Certificates on training for the period May 2011 – September 2012
- /53/ Permit # 2310137200-16 dated 03/05/2012 on stationary sources air pollution, issued to PJSC “Ukrgrafit”. Valid for 2 years, from 03/05/2012 to 25/06/2014
- /54/ Decision # 92/05 dated 03/05/2012 on annulment of permit being re-registered
- /55/ Letter # 355/18/05 dated 03/05/2012 to the deputy general director on health, safety and environment at PJSC “Ukrgrafit” Ie. Titov on re-registration of permit on stationary sources air pollution
- /56/ Permit # 2310137200-16 dated 26/06/2009 on stationary sources air pollution, issued to JSC “Ukrgrafit”. Valid for 5 years, from 26/06/2009 to 25/06/2014
- /57/ Report on air protection for 2008, 2009, 2010, 2011. Form # 2-тп (air)
- /58/ Report on wastes handling for 2008, 2009, 2010, 2011. Form # 1 – wastes
- /59/ Report on water consumption for the 4th quarter of 2008, 2009, 2010, 2011. Form # 2-ТП (water supply)
- /60/ Agreement # 58/804/68627/04 dated 01/03/2006 on electricity supply
- /61/ Statement on check-up of electricity consumption supplied by Zaporizhzhiaoblenergo JSC per tariffs, differentiated according to the JSC “Ukrgrafit” for April 2011
- /62/ Statement on check-up of electricity amount consumed by the



- chemical, mining and smelting enterprises, supplied by Zaporizhzhiaoblenergo JSC to PJSC "Ukrgrafit" for June 2012
- /63/ Statement on check-up of electricity amount consumed by the chemical, mining and smelting enterprises, supplied by Zaporizhzhiaoblenergo JSC to PJSC "Ukrgrafit" for July 2012
 - /64/ General table of monitoring parameters within JI project at PJSC "Ukrgrafit" for 2008, 2009, 2010, 2011, January-October 2012
 - /65/ Natural gas net calorific value (as per certificates) for 2008, 2009, 2010, 2011, January-October 2012
 - /66/ Passports on natural gas physical and chemical parameters for January-October 2012
 - /67/ Passports on natural gas physical and chemical parameters for 2010 (monthly data)
 - /68/ Passports on natural gas physical and chemical parameters for 2008 (monthly data)
 - /69/ Reports on operation of electric calcination units for January-October 2012
 - /70/ Reports on operation of electric calcination units for 2011 (monthly data)
 - /71/ Reports on operation of electric calcination units for 2008 (monthly data)
 - /72/ Reports on operation of electric calcination units for 2009 (monthly data)
 - /73/ Reports on operation of electric calcination units for 2010 (monthly data)
 - /74/ Graphitization activities at section # 4 for January-October 2012
 - /75/ Actual electricity consumption during the burnt-out semi-finished products graphitization process at direct current for 2008-2012
 - /76/ Report for January-October 2012 on results of ERUs monitoring within JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit"
 - /77/ Report for January-December 2011 on results of ERUs monitoring within JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit"
 - /78/ Report for January-December 2010 on results of ERUs monitoring within JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit"
 - /79/ Report for January-December 2009 on results of ERUs monitoring within JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit"
 - /80/ Report for January-December 2008 on results of ERUs monitoring within JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at

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- /81/ Report on water consumption for the 1st -3rd quarter of 2012. Form # 2-ТП (water supply)
- /82/ Report on air protection for 2012. Form # 2-тп (air)
- /83/ Report for November 2012 on results of ERUs monitoring within JI project “Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC “Ukrgrafit”
- /84/ Passports on natural gas physical and chemical parameters for November 2012
- /85/ Report on operation of electric calcination units for November 2012
- /86/ Graphitization activities at section # 4 for November 2012

Persons interviewed:

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

- /1/ Kyrylo Iankovskyi - head of marketing department
- /2/ Volodymyr Bykovets – deputy production director
- /3/ Petro Shaikhet - head of production and dispatcher division
- /4/ Roman Pylypchuk – head metrologist
- /5/ Oleksii Bondarenko – head of energy management department
- /6/ Vadym Kozyn – head of environmental protection department
- /7/ Mykhailo Tytov – deputy head of the workshop # 2/1
- /8/ Sergii Matyiash - senior foreman of the workshop # 3
- /9/ Oleg Sasin - head of the workshop # 4
- /10/ Alla Samokhval - master of electric power accounting
- /11/ Valentyna Popova - mechanic of control instrumentation of electric power accounting group of the workshop # 9
- /12/ Iurii Volychenko – technician of electric power accounting of energy management department
- /13/ Mykola Shlapak – specialist of “KT-Energy” LLC



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APPENDIX A: VERIFICATION PROTOCOL

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project approvals by Parties involved				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	All Parties involved in the JI project issued written project approvals. Namely, the State Environmental Investment Agency of Ukraine has issued the Letter of Approval # 3604/23/7 dated 13/12/2011 of the JI project "Reduction of Greenhouse Gases Emissions Due to Energy Efficiency Improvements and Waste Heat Utilization at JSC "Ukrgrafit" and Federal Environment Agency, German Emissions Trading Authority (RWE Power) has issued the Letter of Approval for this project dated 31/01/2012.	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	All LoAs of regarded JI project are unconditional.	OK	OK
Project implementation				
92	Has the project been implemented in accordance with the PDD regarding which the	As a result of the verification process, the JI project is implemented in accordance with the PDD version 2.2 dated 07/11/2011		OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	determination has been deemed final and is so listed on the UNFCCC JI website?	<p>which has been deemed final.</p> <p>As a matter of fact, implementation of the energy saving measures is realized mainly according to project schedule.</p> <p>Based on the provided documents and results of the site visit, the JI project is generating emission reductions since 01/01/2008.</p> <p>Provided Monitoring Report states that the achieved amount of emission reduction for the monitoring period 01/01/2008 – 30/11/2012 is 85 671 tonnes CO₂ equivalent.</p> <p>On the whole, the JI project activities are conducted according to the Project Design Documents.</p> <p><u>Clarification Request 01 (CL01)</u>. Please clarify the reason of difference between the value of emission reductions estimated in the PDD for the period 01/01/2008 – 30/11/2012 and the value of emission reductions achieved for the same period due to the JI project implementation.</p>	CL01	OK
93	What is the status of operation of the project during the monitoring period?	Monitoring report indicated the current status of the project activity implementation. Based on provided	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		materials, there is known that all project equipments were operational in the reporting period and generating emission reductions. Also, refer to section 92 above.		
Compliance with monitoring plan				
94	Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	The monitoring procedure at JSC "Ukrgrafit" is strictly following the monitoring plan included in the PDD version 2.2 dated 07/11/2011 regarding which the determination has been deemed final. Data used for calculation of emissions reduction based on information that confirmed by JSC "Ukrgrafit" documents.	OK	OK
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) above, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate?	According to reviewed information, there are taken into account key factors such as Production volumes by calcination kiln, Specific natural gas consumption by the kiln in the baseline scenario, Net calorific value for natural gas, CO ₂ emission factor for natural gas combustion, Production of thermoanthracite by reconstructed electrocalcinators, Specific electricity consumption for production of thermoanthracite by the electrocalcinators		OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<p>in the baseline scenario, Production of synthetic graphite by reconstructed electrocalcinators, Specific electricity consumption for production of synthetic graphite by the graphitizing furnaces in the baseline scenario, Specific carbon dioxide non direct emissions factor for consumption of electricity generated by power stations of united energy system of Ukraine, Production volumes by graphitizing furnaces for 600 mm diameter electrodes production, Specific electricity consumption by the graphitizing furnaces, Heat energy generation, Carbon dioxide emission factor for combustion of other bituminous coal, Coal boilers efficiency, etc., and other risks associated with the implementation of the project activity that can influence to the baseline and project emission, and emission reduction due to the JI project.</p> <p><u>Corrective Action Request 01 (CAR01).</u> Some of the JI project parameters have different title in the Monitoring report and Excel calculation spreadsheet as well as in the PDD. Please bring the title of all</p>	CAR01	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		parameters into conformity in the Monitoring report and Excel calculation spreadsheet based on the approved PDD.		
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	Data sources used for calculating emission reductions are clearly identified, reliable and transparent. On site responsible persons register data from the measurement equipments and fixed them to logbooks. In order to ensure accurate recording of the monitoring data, the special Monitoring Procedure was introduced at JSC "Ukrgrafit". According to the Procedure, all the necessary data is collected by existing departments of JSC "Ukrgrafit" that are involved in the JI project and the reports are to be prepared by the Head of marketing department. Furthermore, there is electronic database of monitoring data. All roles and responsibilities are described in details in the Monitoring report.	OK	OK
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by	Yes, emission factors, including default emission factors, are used for calculation of the emission reductions. Emission factors such as CO ₂ emission factor for natural gas combustion, Carbon	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	<p>dioxide emission factor for combustion of other bituminous coal, carbon dioxide emission factor for combustion of graphite powder are not monitored during the crediting period and were justified in the final PDD.</p> <p>Specific carbon dioxide non direct emissions factor for consumption of electricity generated by power stations of united energy system of Ukraine is monitored throughout the crediting period and the most recent assessed and approved value is used.</p> <p>All JI project emission factors are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.</p>		
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner. As was approved in the PDD. Namely, JI specific approach are used regarding monitoring and emission reduction assessment that has been developed in accordance with the Guidance on criteria for baseline setting		OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<p>and monitoring. As a result of documents revision, the major part of the project values connected with estimation of emission reductions are consistent through the Monitoring report and excel spreadsheets with calculation as well as initial monitoring documents. <u>Corrective Action Request 02 (CAR02)</u>. All monitoring values provided in the Monitoring report have to be in line with Excel calculation spreadsheets as well as the initial monitoring documents. As a result of the AIE analysis of the calculations stated in the Excel calculation spreadsheets, it can be concluded that all values comply with the initial documented evidences. But some monitoring values provided in the Monitoring report are not in line with the same one from the Excel calculation spreadsheet. Please pay your attention on the value of Natural gas consumption by the kiln in the project scenario for 2011 (Table B.2.3-3) and the value of Production volumes by calcination kiln for the January – October 2012 (Table B.2.3-1.1), and provide relevant</p>	<p>CAR02</p>	<p>OK</p>



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		amendments.		
Applicable to JI SSC projects only				
96	Is the relevant threshold to be classified as JI SSC project not exceeded during the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?	No, the relevant threshold to be classified as JI SSC project is not exceeded during the monitoring period.	OK	OK
Applicable to bundled JI SSC projects only				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	As was justified by the project developers during the determination process of this JI project, the proposed project is not a debundled component of a larger project. JSC "Ukrgrafit" is not a project participant to any joint implementation or small-scale joint implementation project with a publicly available determination in accordance with paragraph 34 of the JI guidelines.	OK	OK
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the	Yes, Monitoring report was provided to the AIE, and the monitoring procedure at JSC "Ukrgrafit" is realised in compliance with	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	project participants submitted a common monitoring report?	approved monitoring plan.		
98	If the monitoring is based on a monitoring plan that provides for overlapping monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring report? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	The monitoring periods is not overlap.	OK	OK
Revision of monitoring plan				
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	No revision of monitoring plan occurs during the monitoring period 2008 – October 2012. Thus, this section of the protocol is not applicable.	N/A	N/A
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for	Not applicable	N/A	N/A



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the establishment of monitoring plans?			
Data management				
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	Procedures of data collection are implemented in compliance with the approved monitoring plan. Measuring equipment, such as natural gas meters, heat meters, and electricity meters, specific scales, etc. is used for monitoring. Monitoring data of the project is monitored in compliance with scheduled frequency approved in the developed monitoring plan and monitoring procedure. The quality control and quality assurance procedures realised due to performing of crosschecking measures, participation of third parties, and carrying out of troubleshooting procedures.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	All project equipments were operating within the considered monitoring period. As a fact, the monitoring equipment has calibration. It is calibrated with periodic frequency (passport states the calibration frequency for every device) according to the national regulations. During site visit verification team received		OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<p>and reviewed passports and certificates on calibration of all measurement equipment that confirm the fact stated above. Detailed information about the equipment accuracy, calibration dates of the measurement devices, etc. is stated in the section B.4 of the Monitoring the monitoring period 01/01/2008 – 30/11/2012.</p> <p><u>Corrective Action Request 03 (CAR03).</u> Please provide calibration details of the measurement equipment covering the whole monitoring period (i.e., the period from 01/01/2008 to 30/11/2012) where it is necessary.</p>	CAR03	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	Monitoring records are used for the emissions calculation and emission reductions estimation maintained in a traceable and transparent manner.	OK	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	The data collection and management system for the project is in accordance with the JI project Monitoring Procedure of JSC “Ukrgrafit” which was developed on the basis of the approved monitoring plan. Implementation of monitoring system was checked during the site visit, and it was	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		concluded that monitoring system is completely in accordance with the monitoring plan. This fact is also confirmed by the documented evidences.		
Verification regarding programmes of activities (additional elements for assessment)				
102	Is any JPA that has not been added to the JI PoA not verified?	Not applicable	N/A	N/A
103	Is the verification based on the monitoring reports of all JPAs to be verified?	Not applicable	N/A	N/A
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	Not applicable	N/A	N/A
104	Does the monitoring period not overlap with previous monitoring periods?	Not applicable	N/A	N/A
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	Not applicable	N/A	N/A
Applicable to sample-based approach only				
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection,	Not applicable	N/A	N/A



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<p>taking into account that:</p> <p>(i) For each verification that uses a sample-based approach, the sample selection shall be sufficiently representative of the JPAs in the JI PoA such extrapolation to all JPAs identified for that verification is reasonable, taking into account differences among the characteristics of JPAs, such as:</p> <ul style="list-style-type: none"> - The types of JPAs; - The complexity of the applicable technologies and/or measures used; - The geographical location of each JPA; - The amounts of expected emission reductions of the JPAs being verified; - The number of JPAs for which emission reductions are being verified; - The length of monitoring 			



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	periods of the JPAs being verified; and – The samples selected for prior verifications, if any?			
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	Not applicable	N/A	N/A
108	Has the AIE made site inspections of at least the square root of the number of total JPAs, rounded to the upper whole number? If the AIE makes no site inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?	Not applicable	N/A	N/A
109	Is the sampling plan available for submission to the secretariat for the JISC ex ante assessment? (Optional)	Not applicable	N/A	N/A
110	If the AIE learns of a fraudulently	Not applicable	N/A	N/A



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?			

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
<u>Corrective Action Request 01 (CAR01)</u> . Some of the JI project parameters have different title in the Monitoring report and Excel calculation spreadsheet as well as in the PDD. Please bring the title of all parameters into conformity in the Monitoring report and Excel calculation spreadsheet based on the approved PDD.	Table 1, 95 (a)	Project parameters titles have been corrected to ensure consistency with the final version of PDD.	The information was amended in accordance with the final PDD. Issue is closed.
<u>Corrective Action Request 02</u>	Table 1,	The values have been	Updated reporting



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Draft report clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
<p>(CAR02). All monitoring values provided in the Monitoring report have to be in line with Excel calculation spreadsheets as well as the initial monitoring documents. As a result of the AIE analysis of the calculations stated in the Excel calculation spreadsheets, it can be concluded that all values comply with the initial documented evidences. But some monitoring values provided in the Monitoring report are not in line with the same one from the Excel calculation spreadsheet. Please pay your attention on the value of Natural gas consumption by the kiln in the project scenario for 2011 (Table B.2.3-3) and the value of Production volumes by calcination kiln for the January – October 2012 (Table B.2.3-1.1), and provide relevant amendments.</p>	95 (d)	corrected.	documents were revised and found satisfactory. Thus, issue is closed.
<p><u>Corrective Action Request 03 (CAR03)</u>. Please provide calibration</p>	Table 1,	Calibration details of the JI	The information was



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Draft report clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
details of the measurement equipment covering the whole monitoring period (i.e., the period from 01/01/2008 to 30/11/2012) where it is necessary.	101 (b)	project measurement equipment covering the monitoring period from 01/01/2008 to 30/11/2012 were provided in the updated version of the Monitoring report (see section B.4 of the MR).	revised and found in compliance with the documented evidences on calibration of the measurement devices. Thus, issue is closed.
Clarification Request 01 (CL01). Please clarify the reason of difference between the value of emission reductions estimated in the PDD for the period 01/01/2008 – 30/11/2012 and the value of emission reductions achieved for the same period due to the JI project implementation.	Table 1, 92	The reason of the difference between the value of emission reductions estimated in the PDD for the period 01/01/2008 – 30/11/2012 and the value of emission reductions achieved for the same period due to the JI project implementation is caused by the difference between forecasted and actual production volumes of the enterprise. Technological processes included in the project (operation of calcination kiln, operation of electrocalcinators and graphitizing process) are not	Issue is closed because of the explicit clarification.



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Draft report clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		<p>continuous and production volumes are defined mainly by the market demand for the produced materials and goods. Installed exhaust boilers use waste heat energy of the exhaust gases of calcination furnaces and thus their operation and the amount of emissions reduction generated also depend on the production plans of the enterprise. Therefore, due to lower production volumes than expected actual emissions reduction during the years 2011 and 2012 are lower than expected during PDD preparation.</p>	