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TÜV Rheinland (China) Ltd. (TÜV Rheinland)

VERIFICATION REPORT

Verification of the Joint Implementation Large-scale Project

Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning

Initial and first periodic verification:
01/03/2008 – 30/11/2012

Report No. 01 998 9105072886 – VR1

Revision No. 02

Customer: "AGS-2008" LLC

VERIFICATION REPORT

Date of first issue: 18/12/2012	Project No: 01 998 9105072886 – VR1
Executor: TÜV Rheinland (China) Ltd. (TÜV Rheinland)	Organizational unit: TÜV Rheinland Ukraine Ltd. Technical Competence Center
Customer: "AGS-2008" LLC	Client ref.: Zagorskiy Sergiy Igorovych

Summary:

TÜV Rheinland (China) Ltd. (TÜV Rheinland) has performed the initial and first periodic verification of emission reductions generated by the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" for the period from 01/03/2008 till 30/11/2012.

The purpose of verification is to assess the reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks generated by a JI project and reported by the project participants through the monitoring report in accordance with paragraph 37 of the JI guidelines.

In our opinion, the emission reductions reported through the monitoring report, version 2.1 dated 26/12/2012 are fairly stated and are accurate and free of material errors, omissions, or misstatements.

During the monitoring period the project has been implemented in accordance with the project design document version 2.5 dated 19/11/2012.

The emission reductions were calculated correctly on the basis of the approved monitoring plan contained in the project design document version 2.5 dated 19/11/2012.

TÜV Rheinland (China) Ltd. (TÜV Rheinland) is able to verify that the emission reductions generated by the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" for the period from 01/03/2008 till 30/11/2012 amount to 3 499 996 tonnes of CO_2 equivalent.

Report No.: 01 998 9105072886 – VR1	Subject Group: JI
Project title: Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning	
Work carried out by: Dr. Valery Yakubovsky – Team Leader, Technical Competence Center Director Dr. Yuriy Kononov – Technical Expert; Ganna Zadnipryana – Auditor; Dmytro Rakovych – Trainee.	☒ No distribution without permission from the Client or responsible organizational unit
Work verified by: Dr. Lixin Li – Technical Reviewer TÜV Rheinland (China) Ltd. (TÜV Rheinland)	☐ Limited distribution
Verification Report approved by: Dr. Manfred Brinkmann – Accredited Independent Entity Operational Manager	☐ Unrestricted distribution

Date of this revision: 04/01/2013	Revision No.: 02	Number of pages: **41**

Abbreviations

CO_2	Carbon Dioxide
AIE	Accredited Independent Entity
ANE	Authorized national entity
BE	Baseline Emission
CAR	Corrective Action Request
CL	Clarification Request
DR	Document Review
EIA	Environmental Impact Assessment
ERU	Emission Reduction Unit
FAR	Forward Action Request
GHG	Greenhouse Gas
I	Interview
ITL	International Transaction Log
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
LoA	Letter of Approval
MoV	Means of Verification
MP	Monitoring Plan
OSV	On Site Visit
PDD	Project Design Document
PE	Project Emissions
t	tonne
SS	Stakeholders survey
UNFCCC	United Nations Framework Convention on Climate Change

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1 VERIFICATION OPINION

TÜV Rheinland (China) has performed the initial and first periodic verification of the emission reductions generated by the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" for the period from 01/03/2008 till 30/11/2012.

The project participants are responsible for the collection of data in accordance with the monitoring plan and the reporting of emission reductions generated by the project.

It is responsibility of TÜV Rheinland (China) Ltd. (TÜV Rheinland) to express an independent verification opinion – conclusion on the verified amount of emission reductions generated by the project and reported by the project participants through the monitoring report, version 2.1 dated 26/12/2012.

TÜV Rheinland (China) Ltd. (TÜV Rheinland) has assessed the monitoring report on the basis of the monitoring plan contained in the registered project design document version 2.5 dated 19/11/2012 and the monitoring report version 2.1 dated 26/12/2012.

The verification included the assessment of:

- project implementation in accordance with the project design document (PDD);
- compliance with the monitoring plan;
- calculation of emission reductions and expression of a conclusion with a reasonable level of assurance about whether the reported emission reductions data are accurate and free of material errors, omissions, or misstatements;
- quality and management of data and verification that reported emission reductions data is sufficiently supported by evidence.

TÜV Rheinland (China) TÜV Rheinland (China) Ltd. (TÜV Rheinland) verification approach draws on an understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. TÜV Rheinland (China) Ltd. (TÜV Rheinland) planned and performed the verification by obtaining evidence information and explanations that TÜV Rheinland (China) Ltd. (TÜV Rheinland) considers necessary to give reasonable assurance that reported emission reductions are fairly stated, accurate and free of material errors, omissions, or misstatements.

In TÜV Rheinland's (China) Ltd. (TÜV Rheinland) opinion the emission reductions generated by the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" for the period from 01/03/2008 till 30/11/2012 are fairly stated, accurate and

free of material errors, omissions, or misstatements in the monitoring report, version 2.1 dated 26/12/2012.
The GHG emission reductions were calculated correctly on the basis of the registered project design document version 2.5 dated 19/11/2012.

TÜV Rheinland (China) (TÜV Rheinland) is able to verify that the emission reductions generated by the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" for the period from 01/03/2008 till 30/11/2012 amount to 3 499 996 tonnes of CO_2 equivalent.

2 INTRODUCTION

Company "AGS-2008" LLC has commissioned TÜV Rheinland (China) Ltd. (TÜV Rheinland) to carry out the verification of the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" (hereinafter "project") for the period from 01/03/2008 till 30/11/2012. This report contains the findings from the verification and conclusion on the verified amount of emission reductions.

2.1 Objective

The verification is the periodic independent review and ex post verification by an Accreditation Independent Entity (AIE) of the monitored reductions in GHG emissions that have occurred as a result of a Joint Implementation (JI) project activity during a defined verification period.

The purpose of the verification is to assess the reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks generated by a JI project and reported by the project participants through the monitoring report in accordance with paragraph 37 of the JI guidelines.

The objective of this verification was to verify emission reductions generated by the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" for the period from 01/03/2008 till 30/11/2012.

TÜV Rheinland (China) Ltd. (TÜV Rheinland) is an Accredited Independent Entity by the Joint Implementation Supervisory Committee.

2.2 Scope

The scope of this verification is the assessment of:

- project implementation in accordance with the project design document (PDD);
- compliance with the monitoring plan, including the revision of the monitoring plan;
- calculation of emission reductions and expression of a conclusion with a reasonable level of assurance about whether the reported emission reduction data are accurate and free of material errors, omissions, or misstatements;
- quality and management of data and verification that reported emission reduction data is sufficiently supported by evidence.

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions, forward action requests may provide input for corrective actions in order to provide for more accurate future monitoring and reporting.

2.3 JI Project Description

The brief information regarding the project activity is provided in table 1.

Table 1 – JI project brief information

Project Parties involved:	1. Ukraine (Host party). 2. Estonia
Title of the project:	"Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning"
Type of JI activity:	Large-scale
Baseline and monitoring methodology:	JI specific approach
Project entity participant:	"AGS-2008" LLC
Other project participants:	ProEffect OÜ
Location of the project:	Urban type settlement Izvarino, Krasnodonskiy District, Lugansk region, Ukraine
Crediting period of the project:	01/03/2008 – 31/12/2014
Period verified in this report:	01/03/2008 – 30/11/2012
Period verified in previous verification report:	Not applicable

Purpose of the proposed project is dismantling and processing waste heaps by extracting thermal coal from carbonaceous rock, thus avoiding carbon dioxide emissions into the atmosphere from burning carbon component. The project is ecological and is aimed at improving the environmental situation in the region by preventing self-heating and self-ignition of waste heaps, formed by coal mines.

Baseline scenario assumes that the problem of waste heaps combustion will not be effectively resolved, carbonaceous rock of waste heaps will undergo self-ignition and burn until all volume of coal contained in it does not burn. Continuation of existing situation will lead to large emissions of greenhouse gases in the atmosphere and to the general pollution of the ecosystem of the region. In addition, the baseline scenario assumes coal extraction by mining method that leads to

fugitive methane emissions during extraction and carbon dioxide emissions for electricity consumption from the power grid of Ukraine.

The proposed JI project is implemented in urban type settlement Izvarino, Krasnodonskiy District, Lugansk region, Ukraine. Project boundaries include two waste heaps, by the mine formed # 7, 8 "Izvarino" and heap #2 of the mine "Poluantracite" as well as processing complex, located in urban type settlement Izvarino.

The project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" involves the introduction of complex of measures aimed at waste heaps dismantling with the aim of black coal extraction, which will partially replace coal that would otherwise be extracted by mining method, which would in turn lead to fugitive emissions of methane and carbon dioxide by electricity consumption.

Decision on implementation of this project was taken on January 25, 2008. During 2008 a contract was signed with the company-contractor that will provide transportation services, and lease agreement of concentrating mill and contract on recultivation of waste heaps were concluded. The starting date of the project is 25 January 2008, when the order No. 14/08 dated 25/01/2008 on implementation of this project with Joint Implementation Mechanism under the Kyoto Protocol was signed. As the proposed project is very expensive, the only incentive for the implementation of these actions was JI mechanism, which allows selling emission reduction units (ERUs) generated as a result of the project activity, at the International emissions trading market.

The project has been registered under national procedure as Track 1 JI project with the PDD version 2.0 dated 22/11/2012. The documentation on the project including the PDD, approval by the host Party, Determination report is available at:

http://ji.unfccc.int/JIITLProject/DB/Y7ERLP9HJFETFLZ5BNYQISRHXJ0WWH/details

3 METHODOLOGY

The verification process has been carried out using internal procedures of TÜV Rheinland (China) Ltd. (TÜV Rheinland). In order to ensure transparency, a Verification protocol (Annex A to Verification report) was customized for the project, according to the Annex to "Joint Implementation Determination and Verification Manual", version 01. The Verification protocol shows, in a transparent manner, criteria (requirements) and results of verification.

The verification consists of the following three phases:

I) a desk review of the monitoring report including analysis of the compliance of the monitoring plan with the monitoring methodology;

II) follow-up interviews with project stakeholders including on site visit;

III) the resolution of outstanding issues and the issuance of the final verification report and opinion.

The following subsections outline each step in more detail.

3.1 Desk review

Project participants provided TÜV Rheinland (China) Ltd. (TÜV Rheinland) all the necessary documents for document review. The monitoring report version 1.0 dated 04/12/2012 was assessed as part of the verification. In addition, the PDD version 2.0 dated 22/11/2012 and Determination Report No. 01 998 9105072886 – DR dated 29/11/2012, were also reviewed. Supporting documents, such as, acceptance certificates of coal products, electricity, work completion certificate, environmental impact assessments and expert opinions, etc. were available during on site visit.

The information and formulae provided in the monitoring report was compared with PDD and stated data sources.

To address TÜV Rheinland (China) Ltd. (TÜV Rheinland) corrective action and clarification requests, project participants revised the monitoring report and resubmitted it as version 2.1 dated 26/12/2012.

The verification findings presented in this report relate to the monitoring report version 2.1 dated 26/12/2012 and project as described in the PDD version 2.5 dated 19/11/2012.

The following tables outline the documentation reviewed during the verification. Documents provided by "AGS-2008" LLC that relate directly to the components of the project are indicated in table 2. Background documents related to the monitoring and/or methodologies employed in the monitoring or other reference documents are provided in table 3.

Table 2 – Category 1 Documents

No.	Title of the document
/1/	PDD "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" version 2.5 dated 19/11/2012 in Ukrainian.
/2/	PDD "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" version 2.5 dated 19/11/2012 in English.
/3/	Monitoring Report, version 1.0 dated 04/12/2012
/4/	Monitoring Report, version 2.0 dated 19/12/2012
/5/	Monitoring Report, version 2.1 dated 26/12/2012
/6/	GHG emission reduction calculation spreadsheet in Excel.
/7/	"Joint implementation determination and verification manual", version 01, JISC.
/8/	"Guidance on criteria for baseline setting and monitoring", version 03, JISC.
/9/	Letter of Approval for JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" №393523/7 dated 21/12/2012
/10/	Written project approval by a Party involved – Estonia #12-1/11015-2 dated 17/12/2012

Table 3 – Category 2 Documents

No.	Title of the document
/11/	Acceptance certificate of coal products for March 2008 dated 01/04/2008.
/12/	Acceptance certificate of coal products for April 2008 dated 02/05/2008.
/13/	Acceptance certificate of coal products for May 2008 dated 05/06/2008.
/14/	Acceptance certificate of coal products for June 2009 dated 05/07/2009.
/15/	Acceptance certificate of coal products for August 2009 dated 02/09/2009.
/16/	Acceptance certificate of coal products for September 2009 dated 02/10/2009.
/17/	Acceptance certificate of coal products for January 2010 dated 03/02/2010.
/18/	Acceptance certificate of coal products for May 2010 dated 01/06/2010.
/19/	Acceptance certificate of coal products for July 2010 dated 06/08/2010.
/20/	Acceptance certificate of coal products for March 2011 dated

No.	Title of the document
	10/04/2011.
/21/	Acceptance certificate of coal products for June 2011 dated 04/07/2011.
/22/	Acceptance certificate of coal products for August 2011 dated 03/09/2011.
/23/	Acceptance certificate of coal products for February 2012 dated 10/03/2012.
/24/	Acceptance certificate of coal products for July 2012 dated 03/08/2012.
/25/	Acceptance certificate of coal products for September 2012 dated 07/10/2012.
/26/	Acceptance certificates of consumed electricity from supplying company for 2009
/27/	Acceptance certificates of consumed electricity from supplying company for 2012
/28/	Order of Director of "AGS-2008" LLC No.14/08 dated 25/01/2008 on the proposed JI project implementation involving mechanisms of the Kyoto Protocol
/29/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for March 2008
/30/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for April 2008
/31/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for May 2008
/32/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for June 2009
/33/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for July 2009
/34/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for August 2009
/35/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for September 2009
/36/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for January 2010
/37/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for February 2010
/38/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for March 2010
/39/	Acceptance certificate of work completion on the number of

No.	Title of the document
	transported carbonaceous rock and consumed diesel fuel for May 2010
/40/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for September 2011
/41/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for October 2011
/42/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for November 2011
/43/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for December 2011
/44/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for April 2012
/45/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for May 2012
/46/	Acceptance certificate of work completion on the number of transported carbonaceous rock and consumed diesel fuel for June 2012
/47/	Decision No.3 of Izvarynska Village Council Session on transfer of waste heaps to closed corporation "Prominvest-ecology" dated 29/01/1999.
/48/	Decision No.7 of Izvarynska Village Council Session on transfer of waste heaps to closed corporation "Prominvest-ecology" dated 04/02/1999.
/49/	Deed of assignment of coal production rock wastes of Izvarynska Village Council
/50/	Technical passport of waste heap #1 of mine #7 "Izvarino"
/51/	Technical passport of waste heap #2 of mine #8 "Izvarino"
/52/	Technical passport of waste heap #2 of mine "Poluantracite"
/53/	Agreement No.228/01-2008 dated 28/01/2008 on transfer by Melnyk A.V. of waste heaps of former coal mines #7, #8 and mine "Poluantracite" of "AGS-2008" LLC with the aim of their recultivation
/54/	Lease agreement of concentrating complex for processing carbonaceous rock of heaps "AGS-2008" LLC No.210/02-2008 dated 10/02/2008.
/55/	Agreement No.215/02-2008 dated 15/02/2008 between "AGS-2008" LLC and "SMU" LLC on providing transportation services for waste heaps dismantling
/56/	Working draft of complex construction for processing coal containing materials of former coal mines
/57/	Environmental impact assessment. EIA. 2007 Scientific Research Production and Commercial Firm "CER "Eko-Tera Ukraine" LLC.

No.	Title of the document
/58/	Attestation certificate of laboratory on conducting activities to determine fuel etc. No.207 dated August 29, 2008
/59/	Attestation certificate of laboratory on conducting activities to determine fuel etc. No. 285 dated September 23, 2011
/60/	Passport of electricity meter Mercury-230.
/61/	Technical passport of automobile scales of type "DINO"
/62/	Order No.115/1 on information storage
/63/	Order on Coal Mining Safety and Health Approval for coal mine #62 dated 22/03/2012
/64/	Report on the fire risk of Lugansk Region's waste heaps, Scientific Research Institute "Respirator", Donetsk, 2012
/65/	Monitoring instruction, acting at "AGS-2008" LLC
/66/	Agreement with the laboratory "MCM "Bilorichenska" JSC No.110/-02 dated February 10, 2008.
/67/	Agreement with the laboratory "MCM "Bilorichenska" JSC No.423/7-09 dated September 23, 2011.
/68/	Agreement No.20/02-2009 dated February 20, 2009 between "AGS-2008" LLC and "ENERGOCEMENT" LLC on conducting weighing on scales "DINO"
/69/	Statistical Yearbook – Fuel and Energy Resources of Ukraine 2011
/70/	Statistical Yearbook – Fuel and Energy Resources of Ukraine 2009
/71/	Results of the analysis of coal products. Quality certificate for August 2008
/72/	Results of the analysis of coal products. Quality certificate for September 2008
/73/	Results of the analysis of coal products. Quality certificate for January 2009
/74/	Results of the analysis of coal products. Quality certificate for February 2009
/75/	Results of the analysis of coal products. Quality certificate for March 2010
/76/	Results of the analysis of coal products. Quality certificate for April 2010
/77/	Results of the analysis of coal products. Quality certificate for June 2011
/78/	Results of the analysis of coal products. Quality certificate for July 2011
/79/	Results of the analysis of coal products. Quality certificate for August 2012
/80/	Results of the analysis of coal products. Quality certificate for September 2012
/81/	Results of the analysis of coal products. Quality certificate for October 2012
/82/	Results of the analysis of coal products. Quality certificate for November 2012

3.2 Interviews with project stakeholders

TÜV Rheinland (China) Ltd. (TÜV Rheinland) performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Interviewed representatives of "AGS-2008" LLC are summarized in Table 4. The main topics of the interviews are summarized in Table 5.

Table 4 – Persons interviewed

No.	Name	Organization	Position
/1/	Zagorskiy Sergiy Igorovych	Director	"AGS-2008" LLC
/2/	Skrypchenko Elina Volodymyrivna	Chief Accountant	"AGS-2008" LLC
/3/	Shatokhin Pavlo Ivanovych	Technologist of concentrating installation	"AGS-2008" LLC
/4/	Grytsay Valentyn Pavlovych	Power engineer	"AGS-2008" LLC

Table 5 – Interview topics

No.	Date	Interviewed organization	Interview topics
/1/	10/12/2012	"AGS-2008" LLC	➢ QA/QC of the project, Project management ➢ Reporting and calculation of emission reductions, data sources ➢ Project management, site visit ➢ QA/QC of the project, Project management, Project implementation, ➢ Operational reporting, logs, plant visit, monitoring equipment ➢ Environmental licenses, project implementation ➢ Data processing, reporting ➢ Monitoring equipment ➢ Operational reporting ➢ Monitoring activity, Personnel training

3.3 Resolution of Clarification, Corrective and Forward Action Requests

Where TÜV Rheinland (China) Ltd. (TÜV Rheinland), 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:

- Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;
- Clarification request (CL), requesting the project participants to provide additional information for the AIE to assess compliance with the monitoring plan;
- 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 of the project resulted in 18 Corrective action requests and 07 Clarification requests.

TÜV Rheinland (China) Ltd. (TÜV Rheinland) made an objective assessment as to whether the actions taken by the project participants and presented in the Table 1 (Annex A to Verification report) satisfactorily resolve the raised issues and concluded its findings of the verification.

3.4 Internal Technical Review

The verification report including the verification findings underwent a technical review before requesting the publication according to paragraph 37 of the JI guidelines. The technical review was performed by an internal technical reviewer qualified in accordance with TÜV Rheinland (China) Ltd. (TÜV Rheinland) qualification scheme for JI project determination and verification.

3.5 Verification team

The verification team consists of the following personnel indicated in Table 6 below.

Table 6 – Verification team

Name	Role
Dr. Manfred Brinkmann	Accredited Independent Entity Operational Manager
Dr. Lixin Li	Technical Reviewer
Dr. Valery Yakubovsky	Team Leader
Dr. Yuriy Kononov	Technical Expert
Ganna Zadnipryana	Auditor
Dmytro Rakovych	Probationer

4 VERIFICATION FINDINGS

This section summarizes the findings from the verification of the emission reductions generated by the JI project "Complex of measures, directed on decreasing GHG in atmosphere due to waste heaps burning" for the period from 01/03/2008 till 30/11/2012.

4.1 Project approval by Parties involved

In accordance with paragraphs 90 - 91 of the DVM the assessment of this area focuses on whether at least one written project approval by a Party involved in the JI project, other than the host Party(ies), has been issued by the DFP of that Party. It also should be assessed whether the written project approvals are unconditional.

A written project approval by Ukraine (host Party) is available:

Letter of Approval from SEIA of Ukraine No. 3935/23/7 dated 21/12/2012.

Written project approval by a Party involved in JI SSC project, other than the host Party was obtained:
Letter of Approval from Ministry of the Environment of Estonia No. 12-1/11015-2 dated 17/12/2012.
Written project approvals are available at:

http://ji.unfccc.int/JIITLProject/DB/Y7ERLP9HJFETFLZ5BNYQISRHXJ0WWH/details .The written project approvals mentioned above are unconditional.

Identified problem areas for project approval, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Verification Report.

4.2 Project implementation

In accordance with paragraphs 92 - 93 of the DVM the assessment of this area focuses on whether the project has been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website. The status of operation of the project during the monitoring period also should be assessed.

The project has been implemented in accordance with the PDD version 2.5 dated 19/11/2012 regarding which the determination has been deemed final. This JI project is registered as Track 1 project. The description of this project is available in section 2.3 of this Verification report.

The emission reductions generated by the JI project reported for the period from 01/03/2008 till 30/11/2012 amount to 3 499 996 tonnes of CO_2 equivalent.

The verification team of TÜV Rheinland (China) Ltd. (TÜV Rheinland) can confirm, through the on-site visit that all physical features of the proposed JI project activity including data collecting and storage systems have been implemented, the project is completely operational and has been implemented as described in the registered PDD version 2.5 dated 19/11/2012.

Identified problem areas for project implementation, project participants' answers and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Verification Report.

4.3 Compliance with monitoring plan

In accordance with paragraphs 94 - 98 of the DVM the assessment of this area focuses on whether 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.

The monitoring of the JI project occurred in accordance with the monitoring plan contained in the registered PDD version 2.5 dated 19/11/2012.
For calculating the emission reductions key factors influencing the baseline emissions as well as risks associated with the project were taken into account, as appropriate. For more detailed information, please, refer to the determined and registered PDD, version 2.5 dated 19/11/2012.

All data sources used for calculating emission reductions are indicated in table B.2.1 and B.2.3 of the Monitoring Report, version 2.1 dated 26/12/2012.

The emission factor used to calculate emission reductions are selected in accordance with the registered PDD version 2.5 dated 19/11/2012. The choice of this emission factor is appropriately justified in the PDD version 2.5 dated 19/11/2012 and in general accuracy and reasonableness are carefully balanced.

The calculation of emission reductions is done based on conservative assumptions and the most plausible scenarios in a transparent manner. The calculation of the baseline emissions is based on the JI specific approach in accordance with the registered PDD version 2.5 dated 19/11/2012.

The calculation of emission reductions is done by subtracting the project emissions from the baseline emissions.

The detailed calculation of GHG emission reductions for chosen monitoring period (01/03/2008 – 30/11/2012) is provided in supporting documentation.

Identified problem areas for compliance with monitoring plan, project participants' answers and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Verification Report.

4.4 Revision of monitoring plan

If the project participants submitted to the AIE a revised monitoring plan, in accordance with paragraphs 99 - 100 of the DVM the assessment of this area focuses on whether the correct and complete justification for the proposed revision is provided, and whether the proposed revision improves the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans.

There was no revision to the monitoring plan. The monitoring of the JI project occurred in accordance with the monitoring plan contained in the registered PDD, version 2.5 dated 19/11/2012.

Identified problem areas for compliance with monitoring plan, project participants' answers and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Verification Report.

4.5 Data Management

In accordance with paragraph 101 of the DVM the assessment of this area focuses on the quality of the information using standard auditing techniques provided in the monitoring report by assessing whether the data and their sources are clearly identified, reliable and transparent.

Data collection procedure is carried out in accordance with the monitoring plan, including the quality control and quality assurance procedures and has been checked by the verification team on site visit. The monitoring plan is presented in section D of the registered PDD version 2.5 dated 19/11/2012. The data and their sources, provided in monitoring report, are clearly identified, reliable and transparent.

The evidence and records used for the monitoring are maintained in a traceable manner. Verification team got an access to all necessary data on monitoring system and emission reductions and received necessary evidence on site visit.

The data collection and management system for the project is in accordance with the monitoring plan as described in the registered PDD version 2.5 dated 19/11/2012.

Identified problem areas for data management, project participants' answers and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Verification Report.

4.6 Assessment of data and calculation of greenhouse gas emission reductions

The verification team of TÜV Rheinland (China) Ltd. (TÜV Rheinland) verified that all parameters are used correctly in the calculations, all results are verifiable and transparent, all assumptions are described and based on verifiable evidence and calculations are done in accordance with the pre-defined formulae from registered PDD version 2.5 dated 19/11/2012.

According to the Monitoring Report, version 2.1 dated 26/12/2012 and GHG emission reductions calculation spreadsheet in Excel format the emissions for the project scenario, emissions for the baseline scenario and emission reductions for chosen monitoring period (01/03/2008 – 30/11/2012) are provided in table 7 below.

Table 7 – Results for Emission Reductions for Monitoring Period

Monitoring Period:	**01/03/2008 – 30/11/2012**
Emissions for the project scenario:	25 589 tCO_2e
Emissions for the baseline scenario:	2 705 127 tCO_2e
Leakage:	-820 458 tCO_2e
Emission reductions:	3 499 996 tCO_2e

4.7 Remaining issues, CARs from previous verification

There was one pending issue remained from determination of the project:

FAR 01*. The Project hasn`t obtained Letters of Approval from the parties involved.*

During verification project participant has provided to AIE Letter of Approval from Host country (Ukraine) #3935/23/7 dated 21/11/2012 and from the foreign country (Estonia) #12-1/11015-2 dated 17/12/2012

The Forward Action Request (**FAR 01**) from determination has been closed.

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ANNEX A – VERIFICATION PROTOCOL

Table 1 – Requirements Checklist

CHECKLIST QUESTION	DVM* paragraph	Draft Conclusion	Action requested to project participants	Final Conclusion
1. Project approvals by Parties Involved				
1. 1. 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?	90	Yes, both written approvals are presented in the Monitoring Report	OK	OK
1. 2. Are all the written project approvals by Parties involved unconditional?	91	Yes, all the written project approvals by Parties involved are unconditional.	OK	OK
2. Project implementation				
2.1. Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	92	Yes, the project has been implemented in accordance with the determined PDD.	OK	OK
2.2. What is the status of operation of the project during the monitoring period?	93	The project received a positive opinion by AIE and passed the final determination. Currently this project is at the stage of verification. **CAR 01.** Please indicate the number and the name of the document, which regulates the project starting date. **CAR 02.** Please indicate the appropriate document confirming starting date of the project investment phase.	**CAR 01** **CAR 02**	OK
3. Compliance with monitoring plan				
3.1. Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding	94	Yes, the monitoring occurred in accordance with the monitoring plan included in the determined PDD.	**CL 01** **CL 02** **CL 03**	OK

CHECKLIST QUESTION	DVM* paragraph	Draft Conclusion	Action requested to project participants	Final Conclusion
which the determination has been deemed final?		**CAR 03.** Please provide explanation as to why achieved emission reductions during the reporting period in this monitoring report differ from those ones indicated in the PDD. **CL 01.** Please provide explanations concerning monitoring period, for which emission reductions were calculated and the results are presented in Tables. **CL 02.** Please provide information on the coal content in the fraction +50 mm and its further use. **CL 03.** Please provide explanations, what class and grade of coal produced by the project. How this coal is connected with that one, produced under the baseline scenario. **CAR 04.** Please provide documentary evidence (certificate) from the State Statistics Committee on specific consumption of electricity per tonne of coal produced in the coal mine.	**CAR 03** **CAR 04**	
3.2. For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) of DVM*, 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	95 (a)	Yes, all the key factors were taken into account for calculating the emission reductions or enhancements of net removals. **CAR 05.** Provide justification if actions of special machinery drivers and cargo transport will not result in receiving false or inaccurate data on consumption of	**CAR 05** **CAR 06** **CAR 07**	OK

CHECKLIST QUESTION	DVM* paragraph	Draft Conclusion	Action requested to project participants	Final Conclusion
appropriate?		diesel fuel during project activity. **CAR 06.** Please correct the reference to DSTU 3668-99, according to which the density of diesel fuel is determined, as specified document is not valid. **CAR 07.** Please add information on measuring devices including their general photo, photo of installation location, etc.		
3.3. Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	95 (b)	Yes, all the data sources used for calculating emission reductions or enhancements of net removals are clearly identified, reliable and transparent. **CAR 08.** Please provide appropriate justification in Section B.1 that coal concentrate that is stored in the warehouse of finished products does not result in GHG emissions into the atmosphere. **CAR 09**. Please provide truthful information about date of the installation of electricity meter "Mercury-230". **CAR 10.** Please indicate if any replacement of technical equipment occurred during the monitoring period. **CAR 11.** Please provide clear and complete information when calibration of automobile scales were performed	**CAR 08** **CAR 09** **CAR 10** **CAR 11** **CAR 12** **CL 03** **CL 04**	OK

CHECKLIST QUESTION	DVM* paragraph	Draft Conclusion	Action requested to project participants	Final Conclusion
		that are used for weighing coal products under the project. **CAR 12.** Reference to National Inventory Report in Ukraine for 1990-2010 is indicated incorrectly. Please make the appropriate corrections. **CL 04.** During the site visit it was noted that there is a possibility of processing carbonaceous rock of additional heaps that are still undetermined at the concentrating installation. **CL 05.** Please provide an explanation of the use of data source for fugitive methane emission factor during operation of coal mines.		
3.4. Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	95 (c)	Emission factors, including default emission factors, used for calculating the emission reductions or enhancements of net removals, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. **CAR 11.** Please specify in the monitoring report the data source that will be used in case of unavailability of research results of coal samples from Coal Chemistry Laboratory. **CAR 12.** Please provide relevant references to orders of NEIA containing information on the ratio of indirect carbon dioxide emissions from electricity consumption.	**CAR 11** **CAR 12**	OK

CHECKLIST QUESTION	DVM* paragraph	Draft Conclusion	Action requested to project participants	Final Conclusion
3.5. Is the calculation of emission reductions or enhancements of net removals calculated based on conservative assumptions and the most plausible scenarios in a transparent manner?	95 (d)	The calculation of emission reductions or enhancements of net removals are calculated based on conservative assumptions and the most plausible scenarios in a transparent manner. **CAR 13.** Please add information on the certification of Coal Chemistry Laboratory that provides analysis of coal samples.	**CAR 13**	OK
4. Applicable to JI SSC projects only				
4.1. 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.	96	Not applicable	OK	OK
5. Revision of monitoring plan ***Applicable only if monitoring plan is revised by project participants***				
5.1. Did the project participants provide an appropriate justification for the proposed revision?	99 (a)	Not applicable	OK	OK
5.2. Does the proposed revision improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?	99 (b)	Not applicable	OK	OK
6. Data management				

CHECKLIST QUESTION	DVM* paragraph	Draft Conclusion	Action requested to project participants	Final Conclusion
6.1. Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	101 (a)	The implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures.	OK	
6.2. Is the function of the monitoring equipment, including its calibration status, is in order?	101 (b)	The monitoring equipment functions properly, including its calibration. **CAR 14**. Please indicate in the monitoring report data source that will be used in case of unavailability of research results of coal samples from Coal Chemistry Laboratory. **CAR 15.** Please provide references to NEIA orders containing information on the fugitive carbon dioxide emissions factor during electricity consumption.	**CAR 14** **CAR 15**	OK
6.3. Are the evidence and records used for the monitoring maintained in a traceable manner?	101 (c)	The evidence and records used for the monitoring are maintained in a traceable manner. **CAR 16.** Please provide justification that the used procedure is consistent with the standard procedures that are used in the relevant field with reference to the determined PDD, where such a procedure was used. **CL 06.** Please explain value of carbon oxidation factor for coal in the monitoring plan (*OXID coal).* **CL 07.** During project large number of rock mass that contains a certain percentage of carbon is processed. Please provide justification that enrichment wastes do	**CAR 16** **CL 06** **CL 07**	OK

CHECKLIST QUESTION	DVM* paragraph	Draft Conclusion	Action requested to project participants	Final Conclusion
		not affect the level of project emissions. Also, please justify that methane emissions from enriched coal, which is stored at the factory, are neglected.		
6.4. Is the data collection and management system for the project in accordance with the monitoring plan?	101 (d)	Implemented data collection and management system is in accordance with the monitoring plan, as described in the PDD determination of which is considered to be final. **CAR 17.** Not all Third parties of the project are mentioned in Section C.2. Please add relevant information. **CAR 18.** Please provide detailed explanation of how internal audit will be ensured, which means of control are implemented at the enterprise.	**CAR 17** **CAR 18**	OK

DVM* - Joint Implementation Determination and Verification Manual, version 01

Table 2 - Resolution of CARs, CLs and FARs

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
1.	**CAR 01.**	Please indicate the number and the name of the document, which regulates the project starting date.	93	The starting date of the project is March 10, 2008 when the order No. 65 dated 10/03/2008 was signed by the director of "AGS-2008" LLC on JI project implementation. Appropriate explanation was given. Please see revised version of the monitoring report, version 2.0., as well as supporting documents.	**Issue is closed** on the basis of made corrections
2.	**CAR 02.**	Please indicate the appropriate document confirming starting date of the project investment phase.	93	The starting date of the project investment phase is the date of agreement conclusion No. 228/01-2008 dated 28/01/2008 on mine technical recultivation of waste heaps of mines # 7,8 "Izvarino" and waste heap of mine "Poluantracite", located close to urban type settlement Izvarino, Krasnodonskiy District, Lugansk region, Ukraine. Please see revised version of	**Issue is closed** on the basis of made corrections

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
				the monitoring report, version 2.0., as well as supporting documents.	
3.	**CAR 03.**	Please provide explanation as to why achieved emission reductions during the reporting period in this monitoring report differ from those ones indicated in the PDD.	94	Detailed explanation as well as table with comparable levels of emission reductions under the project was provided. Please see revised version of the monitoring report version 2.0.	**Issue is closed** on the basis of made corrections
4.	**CAR 04.**	Please provide documentary evidence (certificate) from the State Statistics Committee on specific consumption of electricity per tonne of coal produced in the coal mine.	94	Corresponding certificate is presented in Annex 4 of this monitoring report. Please see revised version of the monitoring report version 2.0., as well as supporting documents.	**Issue is closed** on the basis of made corrections
5.	**CAR 05.**	Provide justification if actions of special machinery drivers and cargo transport will not result in receiving false or inaccurate data on consumption of diesel fuel during project activity.	95 (a)	Technical services for recultivation of waste heaps are provided by the company-contractor. So clarity and reliability of collecting relevant information as well as monitoring the implementation of internal working regulations is	**Issue is closed** on the basis of made corrections

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
				conventional internal enterprise interests. Only consumption of that fuel, which refers to the project activity, is taken into account under the project. In the case of diesel fuel consumption by other technique (or equipment), this amount will be included in the calculations of GHG emissions. Please see revised version of the monitoring report, version 2.0.	
6.	**CAR 06.**	Please correct the reference to DSTU 3668-99, according to which the density of diesel fuel is determined, as specified document is not valid.	95 (a)	Valid DSTU 4840-2007 Diesel fuel. Specifications for is provided. Please see revised version of the monitoring report version 2.0.	**Issue is closed** on the basis of made corrections
7.	**CAR 07.**	Please add information on measuring devices including their general photo, photo of installation location, etc.	95 (a)	Relevant information was provided in Annex 4 of this monitoring report. Please see revised version of the monitoring report version 2.0.	**Issue is closed** on the basis of made corrections

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
8.	**CAR 08.**	Please provide appropriate justification in Section B.1 that coal concentrate that is stored in the warehouse of finished products does not result in GHG emissions into the atmosphere.	95 (b)	Appropriate justification was provided. Please see revised version of the monitoring report version 2.0.	**Issue is closed** on the basis of made corrections
9.	**CAR 09.**	Please provide truthful information about date of the installation of electricity meter "Mercury-230".	95 (b)	Date of installation of electricity meter in accordance with the technical passport device is 08/10/2007. Appropriate corrections were made. Please see revised version of the monitoring report version 2.0.	**Issue is closed** on the basis of made corrections
10.	**CAR 10.**	Please indicate if any replacement of technical equipment occurred during the monitoring period.	95 (b)	Appropriate explanation was provided. Please see revised version of the monitoring report version 2.0.	**Issue is closed** on the basis of made corrections
11.	**CAR 11.**	Please provide clear and complete information when calibration of automobile scales were performed that are used for weighing coal products under the project.	95 (b)	Relevant information was provided. Please see revised version of the monitoring report version 2.0.	**Issue is closed** on the basis of made corrections

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
12.	**CAR 12.**	Reference to National Inventory Report in Ukraine for 1990-2010 is indicated incorrectly. Please make the appropriate corrections.	95 (b)	http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/ukr-2012-nir-13apr.zip Appropriate reference was corrected. Please see revised version of the monitoring report version 2.0	**Issue is closed** on the basis of made corrections
13.	**CAR 13.**	Please add information on the certification of Coal Chemistry Laboratory that provides analysis of coal samples.	95 (d)	Coal Chemistry Laboratory "MCM "Bilorichenska" JSC meets the criteria for certification and is certified to perform measurements in the field of state metrological control in accordance with certificates No. 207 dated August 29, 2008 and No. 285 dated September 23, 2011. Please see revised version of the monitoring report version 2.0	**Issue is closed** on the basis of made corrections
14.	**CAR 14.**	Please indicate in the monitoring report data source that will be used in case of unavailability of research results of	101 (b)	Guide of quality, volume of coal production and enrichment products in 2008-2010, Ministry	**Issue is closed** on the basis of made corrections

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
		coal samples from Coal Chemistry Laboratory.		of Coal Industry of Ukraine, State Committee of Ukraine, Luhansk 2010 (see Annex 4). Indicators for thermal coal. Please see revised version of the monitoring report version 2.0	
15.	**CAR 15.**	Please provide references to NEIA orders containing information on the fugitive carbon dioxide emissions factor during electricity consumption.	101 (b)	National Environmental Investment Agency Orders: http://www.neia.gov.ua/nature/doccatalog/document?id=127172 – order No. 63 dated 15.04.2011 for 2009; http://www.neia.gov.ua/nature/doccatalog/document?id=126006 – order No. 43 dated 28.03.2011[1] for 2010 No. 75 dated 12/05/2011 for 2011 (2012). Please see revised version of	**Issue is closed** on the basis of made corrections

[1] http://www.neia.gov.ua/nature/doccatalog/document?id=126006

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
				the monitoring report version 2.0	
16.	**CAR 16.**	Please provide justification that the used procedure is consistent with the standard procedures that are used in the relevant field with reference to the determined PDD, where such a procedure was used.	101 (c)	Used monitoring procedure corresponds to the standard procedures for projects of this type and widespread practice in the field. As an example of the standard procedures for monitoring the following monitoring plans can be given: UA2000020 Waste heaps dismantling with the aim of decreasing the greenhouse gases emissions into the atmosphere[2]; UA2000034 Processing of waste heaps at Monolith-Ukraine[3]. The monitoring approach in this project is fully consistent with the standard in the field and includes monitoring of the	**Issue is closed** on the basis of made corrections

[2] http://ji.unfccc.int/JI_Projects/DB/VOZK3HERSNQGFLCY0YZ3AX5W676M5R/Determination/Bureau%20Veritas%20Certification1277814730.41/viewDeterminationReport.html

[3] http://ji.unfccc.int/JI_Projects/DB/IPT7L3CLGIZTGGX27T2101W7XCUCWW/Determination/DNV-CUK1315829182.27/viewDeterminationReport.html

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
				amount of coal that is extracted from waste heap, the amount of fuel consumed as a result of the project activity and the amount of electricity consumed under the project. Additional monitoring parameters (ash and water content of coal that is removed from the waste heap, emission factors, etc.) are used to improve the accuracy of monitoring and responsible for applied approach to the baseline setting and monitoring in the project. Please see revised version of the monitoring report version 2.0	
17.	**CAR 17.**	Not all Third parties of the project are mentioned in Section C.2. Please add relevant information.	101 (d)	PE "SPE "Enerhomax" is a Third party of the project. Please see revised version of the monitoring report, version 2.0, Section C.2.	**Issue is closed** on the basis of made corrections
18.	**CAR 18.**	Please provide detailed explanation of how internal audit will be ensured, which means of control are	101 (d)	Appropriate explanation is given.	**Issue is closed** on the basis of made corrections

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
		implemented at the enterprise.		Please see revised version of the monitoring report version 2.0	
19.	**CL 01.**	Please provide explanations concerning monitoring period, for which emission reductions were calculated and the results are presented in Tables.	94	Monitoring report covers the period from 01/03/2008 to 30/11/2012. Relevant explanation was provided in the monitoring report. Please see revised version of the monitoring report version 2.0	**Issue is closed** on the basis of made explanations
20.	**CL 02.**	Please provide information on the coal content in the fraction +50 mm and its further use.	94	This parameter is not a monitoring indicator so analysis of coal content in fractions +50 mm is not performed. However, the use of efficient technology of rock mass enrichment allows maximum extracting all amount of carbonaceous fraction. This factor allows avoiding re-ignition of rock as enrichment waste is inert mass of degassed raw material. These wastes can be used for road construction, etc.. Please see revised version of	**Issue is closed** on the basis of made explanations

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
				the monitoring report version 2.0	
21.	**CL 03.**	Please provide explanations, what class and grade of coal produced by the project. How this coal is connected with that one, produced under the baseline scenario.	94	Coal of grade "A" is produced under the project. Technology of wet concentration of carbonaceous rock allows extracting coal of 1-50 mm class, which is shipped to the consumer as ROM coal of energy class. Modern technology used under the project, allows extracting high-quality coal concentrate with low ash content. Detailed explanation is given in MR. Please see revised version of the monitoring report version 2.0	**Issue is closed** on the basis of made explanations
22.	**CL 04.**	During the site visit it was noted that there is a possibility of processing carbonaceous rock of additional heaps that are still undetermined at the concentrating installation.	95 (b)	During the monitoring period, the acquisition of other waste heaps is assumed. These new waste heaps will be included in the relevant monitoring report.	**Issue is closed** on the basis of made explanations

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
23.	**CL 05.**	Please provide an explanation of the use of data source for fugitive methane emission factor during operation of coal mines.	95 (b)	National Inventory Report in Ukraine for 1990-2009 gives clear and transparent information on factor value of fugitive methane emissions during operation of mines. In the new edition this source this factor does not have a numerical value, and is represented as a curve on the graph. This method of data demonstration does not give an opportunity to accurately and transparently identify appropriate factor value, but only shows trend of change of this indicator by years. The use of this source implies the existence of high level of uncertainty that puts into doubt general results of calculations of emission reductions. Please see revised version of the monitoring report version 2.0	**Issue is closed** on the basis of made explanations
24.	**CL 06.**	Please explain value of carbon oxidation factor for coal in the	101 (c)	The burning process is a process of oxidation of	**Issue is closed** on the basis

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
		monitoring plan (*OXID coal).*		combustible fuel components. Any combustion process can be accompanied by chemical or physical underburning. Incomplete combustion of fuel is due to various factors and direct way depends on the type and method of fuel combustion. As a result of underburning carbon in the fuel efficiency of the combustion process decreases and fuel consumption increases. In the monitoring plan value of carbon oxidation factor for coal is used ($OXID_{coal}$) from National Inventory Report in Ukraine for 1990-2010, p.465, 471. This parameter is applied conservatively.	of made explanations
25.	**CL 07.**	During project large number of rock mass that contains a certain percentage of carbon is processed. Please provide justification that enrichment wastes do not affect the level of project emissions. Also, please justify that methane emissions from enriched coal, which	101 (c)	The purpose of the project activity is the processing waste heaps and extracting carbon from rock mass. Sorted fraction of high carbon content is used for energy purposes in the national economy. Enrichment	**Issue is closed** on the basis of made explanations

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
		is stored at the factory, are neglected.		wastes are inert rock mass which has very low carbon content. In addition waste heap of a flat shape is formed from enrichment wastes that does not lead to erosion and allows effective monitoring condition of the heap. Due to these factors the possibility of forming emissions originated from burning heaps from enrichment wastes is excluded. Emission factors in the form of consumption of fuel and electricity for wastes treatment enrichment (export, warehousing, etc.) are already included in the calculation of project emissions as the entire volume fuel and electricity consumption by the enterprise is taken into account. Methane emissions from enriched coal, which is stored at the site of the project	

No.	Type of request	Observation	Ref. to checklist question in table 1	Summary of project owner response	Verification team conclusion
				implementation is neglected because this coal is already degassed during initial extraction from the mine and subsequent storage in heaps. In any case, the amount of coal that would be mined the baseline scenario would be subject to the same storage and transportation leading to the same emissions. Therefore, this potential source of emissions is neglected and thus does not affect the calculation of the project emission reductions.	