

VERIFICATION REPORT CARBON MARKETING AND TRADING LTD.

VERIFICATION OF THE «WASTE HEAP DISMANTLING IN SVERDLOVSK DISTRICT OF LUHANSK REGION OF UKRAINE WITH THE AIM OF REDUCING GREENHOUSE GASES EMISSIONS INTO THE ATMOSPHERE»

REPORT NO. UKRAINE-VER/0579/2012 REVISION NO. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

Date of first issue: 27/07/2012		anizational unit: Jreau Veritas	Certification	
2110112012	00100-000	olding SAS	Certification	
Client:		ent ref.:		
Carbon Marketing and Tra	ading Ltd. Mr	r. Tahir Musav	/ev	
Summary: Bureau Veritas Certification district of Luhansk Region of Atmosphere», project of Sm Fedorivka Sverdlovsk distric UNFCCC criteria for the JI, a reporting. UNFCCC criteria subsequent decisions by the The verification scope is defi Entity of the monitored redu following three phases: i) do monitoring plan; ii) follow-up issuance of the final verifi Verification Report & Opinion	of Ukraine with t nall Private Comm t, Luhansk Regio as well as criteria g refer to Article of JI Supervisory Co ned as a periodic actions in GHG er esk review of the interviews with p ication report and	the Aim of Rec mercial Production, Ukraine, and given to provide 6 of the Kyoto ommittee, as we independent rev missions during e monitoring rep project stakeholo d opinion. The	ducing Greenhouse Ga on Company "SLAVUTI I applying JI specific an for consistent project op Protocol, the JI rules II as the host country cri view and ex post determ defined verification peri ort against project desig lers; iii) resolution of ou overall verification, fro	ases Emissions into the CH" located near village oproach, on the basis of berations, monitoring and and modalities and the teria. ination by the Accredited od, and consisted of the gn and the baseline and tstanding issues and the om Contract Review to
The first output of the veri Actions Requests (CR, CAR				ions Requests, Forward
In summary, Bureau Veritas approved project design do runs reliably and is calibrate GHG emission reductions. To omissions, or misstatement monitoring period from 01 31/12/2008, 943479 tonnes for 01/01/2010-31/12/2010, CO2 equivalent for 01/01/2010 Our opinion relates to the related to the approved project	cuments. Installed ed appropriately. ⁻ The GHG emissio ts, and the ERU /01/2008 to 30/0 of CO2 equivaler 1496815 tonnes of 12-30/06/2012) project's GHG er	d equipment be The monitoring son on reduction is co Js issued totaliz 06/2012 (88430 of for 01/01/2009 of CO2 equivale missions and re	ing essential for generic system is in place and alculated accurately and the 5127994 tonnes of 8 tonnes of CO2 equ 9-31/12/2009, 835010 to nt for 01/01/2011-31/12 sulting GHG emission	ating emission reduction the project is generating d without material errors, CO2 equivalent for the uivalent for 01/01/2008- onnes of CO2 equivalent /2011, 968382 tonnes of reductions reported and
Report No.:	Subject Group:			
Ukraine-ver/0579/2012	JI			
Project title: «Waste Heap Dismantling in Sv Region of Ukraine with the Ain Gases Emissions into the Atmo	n of Reducing Gree		-	
Work carried out by: Svitlana Gariyenchyk - Team L Sergii Verteletskyi – Team mer Dmytro Balyn – Technical Spec	nber, Verifier	the ff		
Work reviewed by: Ivan Sokolov - Internal Technica Vladimir Lukin – Technical Spec	al Reviewer		No distribution without Client or responsible or	
Work approved by: Ivan Sokolov – Operational I		s	Limited distribution	2
Date of this revision: Rev. No.: 03/08/2012 02	Number of pa	ages:	Unrestricted distribution	n



VERIFICATION REPORT

Table of Contents

1	INTRODUCTION	3
1.1	Objective	3
1.2	Scope	3
1.3	Verification Team	3
2	METHODOLOGY	4
2.1	Review of Documents	4
2.2	Follow-up Interviews	4
2.3	Resolution of Clarification, Corrective and Forward Action Requests	5
3	VERIFICATION CONCLUSIONS	6
3.1	Remaining issues and FARs from previous verifications	6
3.2	Project approval by Parties involved (90-91)	6
3.3	Project implementation (92-93)	6
3.4	Compliance of the monitoring plan with the monitoring methodology	7
о г	(94-98) Devision of monitoring plan (00, 100)	7
3.5	Revision of monitoring plan (99-100)	8
3.6	Data management (101)	8
3.7	Verification regarding programmes of activities (102-110)	10
4	VERIFICATION OPINION	10
5	REFERENCES	12
APPE	NDIX A: VERIFICATION PROTOCOL	15

Page



VERIFICATION REPORT

1 INTRODUCTION

Carbon Marketing and Trading Ltd. has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project «Waste Heap Dismantling in Sverdlovsk district of Luhansk Region of Ukraine with the Aim of Reducing Greenhouse Gases Emissions into the Atmosphere» (hereafter called "the project") located near village Fedorivka Sverdlovsk district, Luhansk Region, 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 the project design document, the project's baseline study, monitoring plan and monitoring report, and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3 Verification Team

The verification team consists of the following personnel:

Svitlana Gariyenchyk Bureau Veritas Certification Team Leader, Climate Change Verifier

Sergii Verteletskyi Bureau Veritas Certification Climate Change Verifier

Dmytro Balyn

Bureau Veritas Certification Climate Change Verifier, Technical Specialist



VERIFICATION REPORT

This verification report was reviewed by:

Ivan Sokolv Bureau Veritas Certification,

Internal Technical Reviewer

Vladimir Lukin 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 Carbon Marketing and Trading Ltd. and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), and/or 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 version 01 dated 13/07/2012, version 02 dated 01/08/2012 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 02/08/2012 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Carbon Marketing and Trading Ltd. and Small Private Commercial Production Company "SLAVUTICH" were interviewed (see References). The main topics of the interviews are summarized in Table 1.



VERIFICATION REPORT

Table 1 Interview topics

Interviewed	Interview topics
organization	
Small Private	Project implementation status
Commercial	Organizational structure
Production	Responsibilities and authorities
Company "SLAVUTICH"	Personnel training
SLAVOTION	Quality management procedures and technology
	Records of equipment installation
	Control of metering equipment
	Metering record keeping system, database
	Cross-check of the information provided in the MR
	with other sources
Carbon Marketing	Baseline methodology
and Trading Ltd.	Monitoring plan
	Monitoring report
	Deviations from PDD

2.3 Resolution of Clarification, Corrective and Forward Action Requests

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

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

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

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

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

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



VERIFICATION REPORT

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 05 Corrective Action Requests, 06 Clarification Requests, and 0 Forward Action Requests.

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

3.1 Remaining issues and FARs from previous verifications

Not applicable. This verification is initial

3.2 **Project approval by Parties involved (90-91)**

Written project approvals by Ukraine and The Netherlands involved in the JI project have 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.

A letter of approval from the Ukrainian Designated Focal Point was received for the proposed project, reference No. 2022/23/7, dated 27/07/2012.

A letter of approval from the Netherlands Designated Focal Point was received for the proposed project, reference 2012JI37, dated 31/07/2012.

The abovementioned written approval is unconditional.

3.3 **Project implementation (92-93)**

The technology applied in this project is the dense medium coal washing plant. The technological process and equipment used in the project reflect current good engineering practices. The basic technology of coal washing plant has gained wide popularity in the 1990s as the most efficient process for coal washing. Technological process is advanced, does not require vast amounts of materials and workforce, is reliable and productive. The technology used in this project is state-of-the-art technology and is unlikely to be replaced by any other technology during the lifetime of the project as it offer the best quality and efficiency of the coal washing process among other technologies commonly used in Ukraine such as simple vibration screens and spiral separators.



VERIFICATION REPORT

The project has been initiated in the start of 2006. Installation and construction works were initiated by the end of 2007. 15th of November 2007 is the date of commissioning of the beneficiation plant equipment .The operations at the facility have started on the 15th of November 2007. The JI was one of the drivers for the project from the start and financial benefits provided by the JI mechanism were considered as one of the reasons to start the project and are crucial in the decision to start the operations.

All necessary equipment for the project is already implemented, and the starting date of emission reductions is 01/01/2008.

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

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

For calculating the emission reductions, key factors, such as additional electricity consumption, amount of used diesel fuel, amount of coal extracted from waste heaps, ash content and moisture of fractions, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions, such as invoices of diesel fuel and coal, measuring equipment (electric meters, scales) are clearly identified, reliable and transparent.

The following scales were used in the project:

	The electronic strain-measuring car scales obbails			
Data unit	t			
Producer	LLC "Company			
	"Vagovimiryuvalni system"			
Туре	The electronic car scales			
Serial number	13-036			
Accuracy class	Medium (GOST 29329-92)			
Calibration	15/09/2009			
	01/12/2010			
	29/09/2011			
Calibration frequency	1 year			
Validity	SE «Luhanskstandartmetrologiya»			

The electronic strain-measuring car scales 60BA1P



VERIFICATION REPORT

The electronic strain-measuring car scales 40BA1P

Data unit	t
Producer	LLC "Company
	"Vagovimiryuvalni system"
Туре	The electronic car scales
Serial number	B-088
Accuracy class	Medium (GOST 29329-92)
Calibration	22/08/2011
Calibration frequency	1 year
Validity	SE «Luhanskstandartmetrologiya»

The following electric meters were used for monitoring (2008-2012):

Meter	Calibration frequency	Calibartion
Electronic meter CA4YU 672M	6 years	21/12/2006 - 03/02/2010
Electronic meter LZQJ-XC	6 years	01/03/2011 – till now
Electronic meter CA4YU 678	6 years	02/09/2006 - 02/12/2009
Electronic meter CA4YU 672M	6 years	21/12/2006 - 02/12/2009
Electronic meter LZQJ-XC	6 years	01/03/2011- till now
Electronic meter ЦЕ6803В	6 years	01/02/2010 - till now

Emission factors, including default emission factors, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.

3.5 Revision of monitoring plan (99-100)

Not applicable

3.6 Data management (101)

The data and their sources, provided in monitoring report, are clearly identified, reliable and transparent.

The implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures. These procedures are mentioned in the section "References" of this report.

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

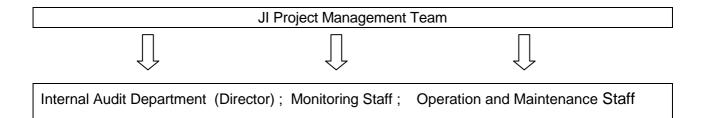
The evidence and records used for the monitoring are maintained in a traceable manner.



VERIFICATION REPORT

The data collection and management system for the project is in accordance with the monitoring plan:

The operational and management structure (as shown in below the figure) and the responsibilities of the principals are as follows. Ultimate responsibility for the project rests with the JI Project Manager.



The JI Project Manager is responsible for:

- Checking and signing off all project operational-related activities
- Appointing and liaising with the accredited independent entity (AIE)
- Identifying an audit team leader to be appointed by the Chief Engineer or a delegated authority
- Appointing a JI technical team to undertake the operational activities
- Organizing training and refresher courses
- Preparing and supervising a Health and Safety Plan for the JI technical team
- Supervising the work of the JI technical team
- Cross checking reported volumes and sales receipts

Internal Audit Department (Director)

The project owner - Small Private Commercial Production Company "SLAVUTICH" implemented provisions of this monitoring plan into its organizational and quality management structure. For monitoring, collection, registration, visualization, archiving, reporting of the monitored data and periodical checking of the measurement devices the management team headed by the Director of the company is responsible.

The monitoring staff is responsible for:

• Monitoring and recording of the relevant parameters

The operation and maintenance staff are responsible for:

• Operation and maintenance of the project infrastructure

• Service and maintenance equipment is performed by technical personnel beneficiation plant.



VERIFICATION REPORT

3.7 Verification regarding programmes of activities (102-110)

Not applicable

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the initial, 1st initial verification of the «Waste Heap Dismantling in Sverdlovsk district of Luhansk Region of Ukraine with the Aim of Reducing Greenhouse Gases Emissions into the Atmosphere» Project in Ukraine, which applies JI specific approach. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

The management of Private Commercial Production Company "SLAVUTICH" 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. 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 02 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design document. 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 30/06/2012					
Baseline emissions	: 4031568	tonnes of CO2 equivalent.			
Project emissions	: 5002	tonnes of CO2 equivalent.			
Leakage	: -1101428	tonnes of CO2 equivalent.			
Emission Reductions (2008-2012)	: 5127994	tonnes of CO2 equivalent.			

From 01/01/2008 to 31/12/2008



VERIFICATION REPORT

Baseline emissions Project emissions Leakage Emission Reductions	: 694380 : 857 : -190785 : 884308	tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent.
From 01/01/2009 to 31/12/2009 Baseline emissions Project emissions Leakage Emission Reductions	: 741500 : 904 : -202883 : 943479	tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent.
From 01/01/2010 to 31/12/2010 Baseline emissions Project emissions Leakage Emission Reductions	: 654469 : 803 : -181344 : 835010	tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent.
From 01/01/2011 to 31/12/2011 Baseline emissions Project emissions Leakage Emission Reductions	: 1178654 : 1464 : -319625 : 1496815	tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent.
From 01/01/2012 to 30/06/2012 Baseline emissions Project emissions Leakage Emission Reductions	: 762565 : 974 : -206791 : 968382	tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent. tonnes of CO2 equivalent.



VERIFICATION REPORT

5 REFERENCES

Category 1 Documents:

Documents provided by Carbon Marketing and Trading Ltd. and Small Private Commercial Production Company "SLAVUTICH" that relate directly to the GHG components of the project.

- /1/ Project Design Document «Waste Heap Dismantling in Sverdlovsk district of Luhansk Region of Ukraine with the Aim of Reducing Greenhouse Gases missions into the Atmosphere» version 2.0 dated 10/07/2012
- /2/ Project Design Document «Waste Heap Dismantling in Sverdlovsk district of Luhansk Region of Ukraine with the Aim of Reducing Greenhouse Gases missions into the Atmosphere» version 2.0 dated 06/06/2012
- /3/ Monitoring Report «Waste Heap Dismantling in Sverdlovsk district of Luhansk Region of Ukraine with the Aim of Reducing Greenhouse Gases missions into the Atmosphere» version 01 dated 13 July 2012
- /4/ Monitoring Report «Waste Heap Dismantling in Sverdlovsk district of Luhansk Region of Ukraine with the Aim of Reducing Greenhouse Gases missions into the Atmosphere» version 02 dated 01 August 2012
- /5/ Excel file "ER_Calculation_Slavutich_MR_v1" dated 13 July 2012
- /6/ Excel file "ER_Calculation_Slavutich_MR_v2" dated 01 Augast 2012
- /7/ Letter of Approval # 2012JI37 issued by the NL Agency Ministry of Economic Affairs, Agriculture and Innovation dated 31/07/2012
- /8/ Letter of Approval # 2022/23/7 dated 27/07/2012, issued by State Environmental Investment Agency of Ukraine
- /9/ Determination and Verification Manual, version 01
- /10/ National inventory report of Ukraine for 1990 2009

Category 2 Documents:

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

- /1/ Certificate on laboratory attestation dated 22/08/2011
- /2/ Weighting certificate on coal dated 14/02/2008
- /3/ Weighting certificate on coal dated 15/02/2008
- /4/ Weighting certificate on coal dated 16/02/2008
- /5/ Weighting certificate on coal dated 17/02/2008
- /6/ Weighting certificate on coal dated 18/02/2008
- /7/ Weighting certificate on coal dated 19/02/2008
- /8/ Weighting certificate on coal dated 20/02/2008
- /9/ Weighting certificate on coal dated 21/02/2008
- /10/ Weighting certificate on coal dated 22/02/2008
- /11/ Weighting certificate on coal dated 23/02/2008
- /12/ Weighting certificate on coal dated 24/02/2008
- /13/ Weighting certificate on coal dated 25/02/2008
- /14/ Weighting certificate on coal dated 25/02/2008



VERIFICATION REPORT

- /15/ Weighting certificate on coal dated 26/02/2008
- /16/ Weighting certificate on coal dated 27/02/2008
- /17/ Weighting certificate on coal dated 28/02/2008
- /18/ Agreement # 20/12 on service dated 20/12/2007
- /19/ Agreement # 632 dated 26.06.2009 on energy supply service
- /20/ Consignation agreement dated 03/01/2008
- /21/ Agreement # 02-01/2008 dated 02/01/2008
- /22/ Weighting certificate on coal dated 16/01/2008
- /23/ Weighting certificate on coal dated 14/01/2008
- /24/ Weighting certificate on coal dated 15/01/2008
- /25/ Weighting certificate on coal dated 17/01/2008
- /26/ Weighting certificate on coal dated 18/01/2008
- /27/ Weighting certificate on coal dated 20/01/2008
- /28/ Weighting certificate on coal dated 21/01/2008
- /29/ Weighting certificate on coal dated 22/01/2008
- /30/ Weighting certificate on coal dated 23/01/2008
- /31/ Weighting certificate on coal dated 24/01/2008
- /32/ Weighting certificate on coal dated 25/01/2008
- /33/ Weighting certificate on coal dated 26/01/2008
- /34/ Weighting certificate on coal dated 27/01/2008
- /35/ Weighting certificate on coal dated 28/01/2008
- /36/ Weighting certificate on coal dated 29/01/2008
- /37/ Weighting certificate on coal dated 30/01/2008
- /38/ Weighting certificate on coal dated 31/01/2008
- /39/ Agreement # 19/05 dated 18/05/2007 on delivery and installation of equipment
- /40/ Technical calibration statement on measuring equipment in electric installations up to 1000V
- /41/ Sealing certificate on measuring equipment dated 27/01/2012
- /42/ Sealing certificate on measuring equipment dated 23/10/2012
- /43/ Sealing certificate on measuring equipment dated 21/05/2012
- /44/ Passport on transformer type TM, serial # 1114167
- /45/ Quality certificate on coal # 285
- /46/ Weighting certificate on coal dated 01/05/2010
- /47/ Weighting certificate on coal dated 02/05/2010
- /48/ Weighting certificate on coal dated 03/05/2010
- /49/ Weighting certificate on coal dated 04/05/2010
- /50/ Weighting certificate on coal dated 05/05/2010
- /51/ Weighting certificate on coal dated 06/05/2010
- /52/ Weighting certificate on coal dated 07/05/2010
- /53/ Weighting certificate on coal dated 08/05/2010
- /54/ Weighting certificate on coal dated 09/05/2010
- /55/ Weighting certificate on coal dated 10/05/2010
- /56/ Weighting certificate on coal dated 11/05/2010
- /57/ Weighting certificate on coal dated 12/05/2010
- /58/ Weighting certificate on coal dated 13/05/2010
- /59/ Weighting certificate on coal dated 14/05/2010
- /60/ Weighting certificate on coal dated 15/05/2010



VERIFICATION REPORT

- /61/ Weighting certificate on coal dated 16/05/2010 /62/ Weighting certificate on coal dated 17/05/2010 /63/ Weighting certificate on coal dated 18/05/2010 /64/ Weighting certificate on coal dated 19/05/2010 /65/ Weighting certificate on coal dated 20/05/2010 /66/ Weighting certificate on coal dated 21/05/2010 /67/ Weighting certificate on coal dated 22/05/2010 /68/ Weighting certificate on coal dated 23/05/2010 /69/ Weighting certificate on coal dated 24/05/2010 /70/ Weighting certificate on coal dated 25/05/2010 /71/ Weighting certificate on coal dated 26/05/2010 /72/ Weighting certificate on coal dated 27/05/2010 /73/ Weighting certificate on coal dated 28/05/2010 /74/ Weighting certificate on coal dated 29/05/2010 /75/ Weighting certificate on coal dated 30/05/2010 /76/ Invoice on diesel for September 2010 /77/ Invoice on diesel for October 2010 /78/ Invoice on diesel for November 2010
- /79/ Invoice on diesel for December 2010
- /80/ Invoice on diesel for January 2011
- /81/ Invoice on diesel for February 2011
- /82/ Invoice on diesel for March 2011
- /83/ Invoice on diesel for April 2011
- /84/ Invoice on diesel for May 2011
- /85/ Invoice on diesel for March 2009
- /86/ Invoice on diesel for April 2009
- /87/ Invoice on diesel for May 2009
- /88/ Invoice on diesel for June 2009
- /89/ Invoice on diesel for July 2009
- /90/ Invoice on diesel for Augast 2009
- /91/ Invoice on diesel for September 2009
- /92/ Invoice on diesel for November 2009
- /93/ Invoice on diesel for November 2009

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/ V. Kumonok director of Small Private Commercial Production Company "SLAVUTICH"
- /2/ V. Holodnik Head of production department
- /3/ V. Kornuhov cheef engineer of Small Private Commercial Production Company "SLAVUTICH"
- /4/ Tahir Musayev representative of the project Developer CARBON MARKETING AND TRADING LTD
- /5/ Valentina Bubenok representative of the project Developer CARBON MARKETING AND TRADING LTD

Please do not delete the Bookmark named "numPages" on this last page in the report.



VERIFICATION REPORT

APPENDIX A: VERIFICATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

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

DVM	Check Item	Initial finding	Draft	Final
Paragra			Conclusio	Conclusio
ph			n	n
-	pprovals 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?	Written project approvals from Ukraine and the Netherlands have been issued by the DFP of those Parties when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines	Pending	ОК
91	Are all the written project approvals by Parties involved unconditional?	Yes, all the written approvals by Parties involved are unconditional	Pending	ОК
Project in	plementation			
92	Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?		ОК	ОК
93	What is the status of operation of the project during the monitoring period?	CAR01 Please, state in PDD if some project equipment has not been working during monitoring period. Please specify this cases CAR02	CAR01 CAR02 CAR03	ОК



VERIFICATION REPORT				B U R E A U VERITAS
DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
		Please make amendments in the geographic coordinates of the site CAR03 Please provide order that claims about data storage for 2 years after last transfer of ERus		
Complian	ce with monitoring plan	Storage for 2 years after last transfer of Ertas		
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 occurred in accordance with the monitoring plan included in the PDD	ОК	ОК
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?	For calculating the emission reductions key factors, e.g. those listed Section B.2 of the determined PDD version 2.0., as well as Section 3.4 of the present Verification Report, influencing the baseline emissions as well as risks associated with the project were taken into account, as appropriate.	OK	OK
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	CL01 NIR of Ukraine 1990-2010 asserts that there is coefficient of methane emission for coal that is already mined 2,4 m3/t (p.122). Please clarify why this special coefficient was not used in the project CL02	CL01 CL02 CAR04 CL03 CL04 CL05	ОК



VERIFICATION REPORT				BUREAU VERITAS
DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
		It is stated in section B of the PDD that parameter "Average electricity consumption per ton of coal, produced in Ukraine in the year y" is taken from: Fuel and Energy resources of Ukraine, Statistical Yearbook, State Statistics Committee of Ukraine, Kiev 2009-2010. Please clarify which category of links on abovementioned website was used CAR04 It necessary to know the type of mined coal in order to use Guidance of quality, volume coal production and enrichment products in 2008-2012, Ministry of Coal Industry of Ukraine, State Committee of Ukraine. Please provide laboratory certificate that shows the type of mined coal CL03 The values of average ash content of coal produced in Ukraine are inconsistent with those in Guidance of quality, volume coal production and enrichment products in 2008-2012. Please provide appropriate document that supports initial values, taking into account CAR above CL04 The same situation as in CL's above appears in the following parameter: average moisture of coal produced in Ukraine is inconsistent with that in	CL06	

VERIFICATION REPORT



Paragra Conclusio Conclusio ph Guide of quality. Please make appropriate corrections or provide reasonable justification n n CL05 Report, done by SRI "Respirator" 2012, contains the value of correction factor for the uncertainty of the waste heaps burning process equal to 0,78, but current monitoring report uses value equal 0,865. Please explain your choice CL06 OK OK 95 (c) Are emission factors, including default emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? OK OK 95 (d) Is the calculation of emission reductions or enhancements of net The calculation of emission reductions is based on conservative assumptions and the most plausible OK					VERITAS
CL05 Report, done by SRI "Respirator" 2012, contains the value of correction factor for the uncertainty of the waste heaps burning process equal to 0,78 , but current monitoring report uses value equal 0,865. Please explain your choice CL06 Please justify the value of net caloric value of diesel for 2010 (NIR of Ukraine 1990-2010)OK95 (c)Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?OKOI95 (d)Is the calculation of emission reductions or enhancements of net calculation of emission reductions or enhancements of net selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?OKOI95 (d)Is the calculation of emission reductions or enhancements of net accuracy and reasonableness, and appropriately justified of the choice?OKOI	Paragra	Check Item	Initial finding	Conclusio	Final Conclusio n
Report, done by SRI "Respirator" 2012, contains the value of correction factor for the uncertainty of the waste heaps burning process equal to 0,78 , but current monitoring report uses value equal 0,865. Please explain your choice CL06 Please justify the value of net caloric value of 					
 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. They are provided in the CO2 emissions reduction calculation spreadsheet to the present MR as well as in Sections B.2.1. of the MR. 95 (d) Is the calculation of emission reductions or enhancements of net removals or enhancements of net conservative assumptions and the most plausible 			Report, done by SRI "Respirator" 2012, contains the value of correction factor for the uncertainty of the waste heaps burning process equal to 0,78, but current monitoring report uses value equal 0,865. Please explain your choice CL06 Please justify the value of net caloric value of		
reductions or enhancements of net conservative assumptions and the most plausible	95 (c)	emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and	factors, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. They are provided in the CO2 emissions reduction calculation spreadsheet to the present MR as well as in Sections B.2.1. of	ОК	OK
assumptions and the most plausible scenarios in a transparent manner?		Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?		ОК	ОК
Applicable to JI SSC projects only96Is the relevant threshold to be classifiedN/AN/A			N/A	N/A	N/A



VERIFICAT	TION REPORT			BUREAU VERITAS
DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
	 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? 			
Applicab 97 (a)	Has the composition of the bundle not changed from that is stated in F-JI- SSCBUNDLE?	N/A	N/A	N/A
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	N/A	N/A	N/A
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? of monitoring plan	N/A	N/A	N/A



VERIFICATI		B U R E A U V E R I T A S		
DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
Applicabl	e only if monitoring plan is revised by p	project participant		
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	During the time of the monitoring period under consideration no changes or revisions to the monitoring plan occurred. Monitoring procedure was carried out in accordance with the initial monitoring plan	OK	ОК
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?	N/A	N/A	N/A
Data man	agement			
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	Yes, the implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures. More over calibrations of measuring equipment are conducting taking into account national standards and procedures	ОК	ОК
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	Yes, the function of the monitoring equipment, including its calibration status, is in order. CAR05 Please provide passports on electric meters: type CA4YU672M (serial # 023925),type LZQJ-XC (serial # 3311992),type CA4YU678M (serial	CAR05	ОК



DVM	Check Item	Initial finding	Draft	Final
Paragra	Check lieli		Conclusio	Conclusio
ph			n	n
pn		# 450359), type CA4YU672M (serial # 519940), type LZQJ-XC (serial 3311986), type ЦЕ6803B (serial # 008522032319475)		
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	Yes, all evidence and records are used for the monitoring maintained in a traceable manner	OK	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	Yes, the data collection and management system for the project is in accordance with the monitoring plan. For further information see section	OK	ОК
Verificatio	on regarding programmes of activities (additional elements for assessment)		
102	Is any JPA that has not been added to the JI PoA not verified?	N/A	N/A	N/A
103	Is the verification based on the monitoring reports of all JPAs to be verified?	N/A	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?	N/A	N/A	N/A
104	Does the monitoring period not overlap with previous monitoring periods?	N/A	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? e to sample-based approach only	N/A	N/A	N/A



VERIFICATI	ON REPORT			B U R E A U V E R I T A S
DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into account that: (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: - The types of JPAs; - The complexity of the applicable technologies and/or measures used; - The geographical location of each JPA; - The amounts of expected emission reductions of the JPAs being verified; - The number of JPAs for which emission reductions are being verified; - The length of monitoring periods of	N/A	N/A	N/A



VERIFICATION REPORT				B U R E A U VERITAS
DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
	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?	N/A	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?	N/A	N/A	N/A
109	Is the sampling plan available for submission to the secretariat for the JISC ex ante assessment? (Optional)	N/A	N/A	N/A
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?	N/A	N/A	N/A



VERIFICATION REPORT

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarification and corrective action requests by verification team	Ref. to checklis t questio n in table 1	Summary of project participant response	Verification team conclusion
CAR01 Please, state in PDD if some project equipment has not been working during monitoring period. Please specify this cases	93	This information was provided in section D.1 PDD and also provided in section B.1 of Monitoring Report.	The issue is closed
CAR02 Please make amendments in the geographic coordinates of the site	93	The geographic coordinates of the site are corrected and also are presented in Fig.	The issue is closed
CAR03 Please provide order that claims about data storage for 2 years after last transfer of ERus		The order is provided.	The issue is closed



VERIFICATION REPORT			B U R E A U V E R I T A S
CL01 NIR of Ukraine 1990-2010 asserts that there is coefficient of methane emission for coal that is already mined 2,4 m3/t (p.122). Please clarify why this special coefficient was not used	95(b)	2,4 m3/t (p.122) is a coefficient of emissions of methane in the post-coal mining whereas in our calculations we use another coefficient such as average rate for fugitive methane emissions from coal mining. The principal difference between these two factors is one takes into account the emissions of methane during the mining, while another - post production. The period after the coal is not considered in the project.	The issue is closed
CL02 It is stated in section B of the PDD that parameter "Average electricity consumption per ton of coal, produced in Ukraine in the year y" is taken from: Fuel and Energy resources of Ukraine, Statistical Yearbook, State Statistics Committee of Ukraine, Kiev 2009-2010. Please clarify which category of links on abovementioned website was used	95(b)	Unfortunately, the National Statistics website does not allow saving the complete address of the resource by sending all the time on the home page. Below is presented the easy traceable way to the document. <u>http://www.ukrstat.gov.ua/</u> - Publications - Energy statistics - Fuel and Energy resources of Ukraine. Also, to confirm the selection and value of this coefficient can use the additional reference to the already registered projects:	The issue is closed



VERIFICATION REPORT			B U R E A U V E R I T A S
CAR04 It necessary to know the type of mined coal in order to use Guidance of quality, volume coal production and enrichment products in 2008- 2012, Ministry of Coal Industry of Ukraine, State Committee of Ukraine. Please provide laboratory certificate that shows the type of mined coal	95(b)	In the Guidance of quality, volume coal production and enrichment products in 2008-2010 all the coal mined in Ukraine are divided into two major groups, namely, energy coal and coke coal. In our case, has been selected energy coal, as the main part of the extracted coal refers to the group anthracite. But we cannot exclude of other types of coal, because they are available in small negligible amounts. Statement of transfer and acceptance and laboratory certificates for various grades of coal is provided.	The issue is closed
CL03 The values of average ash content of coal produced in Ukraine are inconsistent with those in Guidance of quality, volume coal production and enrichment products in 2008- 2012. Please provide appropriate document that supports initial values, taking into account CAR above	95(b)	See answer to CAR04.	The issue is closed



VERIFICATION REPORT			B U R E A U V E R I T A S
CL04 The same situation as in CL's above appears in the following parameter: average moisture of coal produced in Ukraine is inconsistent with that in Guide of quality. Please make appropriate corrections or provide reasonable justification	95(b)	See answer to CAR04.	The issue is closed
CL05 Report, done by SRI "Respirator" 2012, contains the value of correction factor for the uncertainty of the waste heaps burning process equal to 0,78, but current monitoring report uses value equal 0,865. Please explain your choice	95(b)	The referred Report on the fire risk of Luhansk Region's waste heaps, conducted by Scientific Research Institute "Respirator" in 2012 is provided to the verification team.	The issue is closed
CL06 Please justify the value of net caloric value of diesel for 2010 (NIR of Ukraine 1990-2010)	95(b)	The data of the latest National Inventory Report of Ukraine (1990 – 2010) p. 479 is used. The references for NIR - <u>http://unfccc.int/national_reports/anne</u> <u>x_i_ghg_inventories/national_inventori</u> <u>es_submissions/items/6598.php</u>	The issue is closed



VERIFICATION REPORT			U R E A U E R I T A S
CAR05 Please provide passports on electric meters: type CA4YU672M (serial # 023925),type LZQJ-XC (serial # 3311992),type CA4YU678M (serial # 450359), type CA4YU672M (serial # 519940), type LZQJ- XC (serial 3311986), type LE6803B (serial # 008522032319475)	All passports on electric meters are provided.	The issue is closed	