

# VERIFICATION REPORT SIA "VIDZEME EKO"

VERIFICATION OF THE WASTE PRODUCTS UTILIZATION OF COAL BENEFICATION PROCESS WITH THE AIM OF DECREASING GREENHOUSE GASES EMISSIONS INTO THE ATMOSPHERE AT THE SLUDGE DEPOSITORY OF MEP SLAVIANOSERBSKA

INITIAL AND FIRST PERIODIC FOR 01/10/2008-31/08/2012

REPORT NO. UKRAINE-VER/0766/2012 REVISION NO. 01

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT: WASTE PRODUCTS UTILIZATION OF COAL BENEFICATION PROCESS WITH THE AIM OF DECREASING GREENHOUSE GASES EMISSIONS INTO THE ATMOSPHERE AT THE SLUDGE DEPOSITORY OF MEP SLAVIANOSERBSKA

Date of first issue: 24/10/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client:	Client ref.:
SIA "Vidzeme Eko"	Victor Tkachenko

Summary:

Bureau Veritas Certification has made the initial, and 1<sup>st</sup> periodic verification of the "Waste products utilization of coal benefication process with the aim of decreasing greenhouse gases emissions into the atmosphere at the sludge depository of MEP Slavianoserbska", project of SIA "Vidzeme Eko" located in Rodakove village, Slovyanoserbskyi district Luhansk Region, Ukraine, and applying JI specific approach, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the monitoring report against project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the verification process is a list of Clarification, Corrective Actions Requests, Forward Actions Requests (CR, CAR and FAR), presented in Appendix A.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 7389358 tonnes of CO2 equivalent for the monitoring period from 01/10/2008 to 31/08/2012 (341390 tonnes of CO2 equivalent for 01/10/2008-31/12/2008, 1904893 tonnes of CO2 equivalent for 01/01/2009-31/12/2009, 1907901 tonnes of CO2 equivalent for 01/01/2010-31/12/2010, 1902408 tonnes of CO2 equivalent for 01/01/2011-31/12/2011, 1332766 tonnes of CO2 equivalent for 01/10/2012-31/08/2012).

Our opinion relates to the project's GHG emissions and resulting GHG emission reductions reported and related to the approved project baseline and monitoring, and its associated documents.

Report No.:	Subject Group:		
UKRAINE-ver/0766/2012	JI		
Project title:			
Waste products utilizatio	n of coal benefication		
process with the aim of	decreasing greenhouse		
gases emissions into the a	atmosphere at the sludge		
depository of MEP Slaviance	oserbska		
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## **1 INTRODUCTION**

SIA "Vidzeme Eko" has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Waste products utilization of coal benefication process with the aim of decreasing greenhouse gases emissions into the atmosphere at the sludge depository of MEP Slavianoserbska" (hereafter called "the project") at Rodakove village, Slovyanoserbskyi 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:

Vyacheslav Yeriomin Bureau Veritas Certification	Team Leader, Climate Change Verifier
Volodymyr Kulish Bureau Veritas Certification	Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov



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Bureau Veritas Certification, Internal Technical Reviewer

Nikolay Chekhmestrenko

Bureau Veritas Certification, Technical Specialist

# 2 METHODOLOGY

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

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

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

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

# 2.1 Review of Documents

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

The verification findings presented in this report relate to the Monitoring Report version(s) 2.0 and project as described in the determined PDD.

# 2.2 Follow-up Interviews

On 24/09/2012 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 PE "Spetsmontazh FC" and SIA "Vidzeme Eko" were interviewed (see References). The main topics of the interviews are summarized in Table 1.



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#### Table 1 Interview topics

Interviewed organization	Interview topics	
PE "Spetsmontazh FC"	<ul> <li>Organizational structure</li> <li>Responsibilities and authorities</li> <li>Roles and responsibilities for data collection and</li> <li>processing</li> <li>Installation of equipment</li> <li>Data logging, archiving and reporting</li> <li>Metering equipment control</li> <li>Metering record keeping system, database</li> <li>IT management</li> <li>Training of personnel</li> <li>Quality management procedures and technology</li> <li>Internal audits and check-ups</li> </ul>	
CONSULTANT SIA "Vidzeme Eko"	<ul> <li>Baseline methodology</li> <li>Monitoring plan</li> <li>Monitoring report</li> <li>Excel spreadsheets</li> </ul>	

# 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.

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

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

# **3 VERIFICATION CONCLUSIONS**

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 8 Corrective Action Requests, 1 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

There no FARs remaining from the determination provided by Bureau Veritas Certification.

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

Written project approvals has been obtained from DFPs of both Parties Involved. Letter of Approval #2928/23/7 dated 05/10/2012 issued by State Environment Investment Agency of Ukraine. Letter of Approval #12.2-02/12395 dated 04/09/2012 has been issued from Latvian Ministry of Environment Protection and Regional Development.

The abovementioned written approval is unconditional.

Identified problem areas applicable to the written project approvals, responses of project participants and Bureau Veritas Certification conclusions are listed in the Annex A of this Report (refer to CAR01, CL01)

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

Proposed project foresees extraction and enrichment of coal slurry from slurry pond of State Enterprise "Group Enrichment Plant Slovyanoserbska".

Project technology may be described as follow:



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Bulldozers plan one of the slurry pond's slopes to give it an inclination for natural flow of water contained in the slurry as it fills in the storage. Access roads are filled with rocks not to get technique into sinking in the slurry. Burned rocks of the dump are used to cover the roads. The thickness of the rock layer must be 50 cm at least. While filling, bulldozer flattens rocks according to the technique movement.

Excavators loads slurry into trucks and transports it to the primary storage, where it is evenly filled along the edge. Bulldozer flattens it in even layers with the bulldozer blade. As the result of such activities raw material partially loses its moisture. Frontal loader loads dried slurry into tracks and transport it to the place of complete machining.

Slurry, shipped on the industrial site, is transported to the enrichment plant, where the enrichment process is carried out. Slurry through the receiving hopper is shipped by the feeding conveyer to the scrubbersizing trammel, where the previous disintegration and classification of source material is carried out before the enrichment process. When slurry gets into the sizing trammel, it crumbles and fall on the sieve, where water, which is supplied under pressure out of nozzles, wash it away as a coal pulp to the under sieve part of the sizing trammel with the set-up size of the upper class. Undersize product – is the rock mass, pieces of clay, reed, branches; all other things move away through the discharge section of the sizing trammel and by feeding conveyer is sent to waste. Pulp by gravity is transmitted to the shaking grizzle equipped with two sieves, where it is separated into three products; two-are oversize products and one is undersize product. Oversize product (concentrate) with humidity 18-22% by feeding conveyer is transported to the sedimentation centrifuge, and from the centrifuge, with humidity 11-12%, to the pile for drying.

End product can be used for making a charge and be transported to power plants for burning in boilers. It can be used without blending at TPP if it is equipped by boilers that can use for burning coal with high ash content.

Machinery involved in the slurry removal: 4 loaders, 4 bulldozers, 12 excavator, 75 trucks.

Sludge depository was put out operation in 1994 year

Private Enterprise "Spetsmontazh FC" uses lawfully the slurry pond. Relevant contract documentation are mentioned in the Table 2 of this Report.

Complex for the enrichment "Shidno-Ukrainska Zbagachuvalna kompaniya" is sub-contract of PE "Spetsmontazh FC" and situated about 26 km near the pond

Data on waste heaps such a geographical coordinates, mass value of containing rocks, physical measures, main work characteristics of heavy

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transporting vehicles and equipment of coal beneficiation plant are provided in the PDD.

Waste heap dismantling and coal benefication was started in 2008 year. Crediting period for ERUs generation started 01/10/2008.

Level of project activity is depended by coal demand at Ukrainian market. Project owner doesn't keep coal at warehouses and produce beneficiated rock mass as when necessary.

Significant project parameters, such as values of produced coal concentrate, consumed diesel fuel and electricity, are provided in the sections B.2.4, B.2.3 and B.2.5 of the Monitoring Report.

Project boundaries described in the determined PDD are kept; coal from another waste heaps doesn't uses in project.

Difference between estimated emission reductions indicated in the PDD and provided in the Monitoring report is not observed. Factually PDDs calculations are performed ex-post for monitoring.

Identified problem areas applicable to the project implementation status, responses of project participants and Bureau Veritas Certification conclusions are listed in the Annex A of this Report (refer to CAR02, CAR03)

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

For calculating the emission reductions, key factors, such as availability of work power and financing, seasonal coal requirement on Ukraine inside market, prices of diesel fuel and electric energy, 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 work forecasts, bookkeepers invoices, laboratory analysis samples, work logbooks are clearly identified, reliable and transparent.

Emission factors, including default emission factors, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. Default emission factors, such as emission factor for electricity consumption, carbon content in diesel fuel and coal, are in line with Ukraine National GHG Inventory report for 1990-2010 years.

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

Identified problem areas applicable to the compliance of the monitoring plan with the monitoring methodology, responses of project participants and Bureau Veritas Certification conclusions are listed in the Annex A of this Report (refer to CAR04, CAR05).

# 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.

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

Monitoring report contains list of project measuring equipment with data on measuring devices calibration/replacement in the section B.1.2 of the Monitoring Report.

Consumption of diesel fuel is accounting by bookkeeper invoices.

The evidence and records used for the monitoring are maintained in a traceable manner. Initially data on value and quality of produced coal, track's load, diesel fuel consumption, sludge quantity is obtained from logbooks of relevant work suppliers. The data on electricity consumed is obtained from monthly reports of Regional Electric Network.

The data required to monitor JI project is routinely collected within the normal operations of the "Skhidno-ukrainska zbagachuvalna companiya" LLc and therefore JI monitoring is integral part of routine monitoring

The data collection and management system for the project is in accordance with the monitoring plan. Data monitoring and collection system described in the monitoring report is adequate and working.

Identified problem areas applicable to the project data management, responses of project participants and Bureau Veritas Certification conclusions are listed in the Annex A of this Report (refer to CAR06-CAR08)



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# **3.7** Verification regarding programmes of activities (102-110)

"Not applicable"

# **4 VERIFICATION OPINION**

Bureau Veritas Certification has performed the initial and 1<sup>st</sup> periodic verification of the "Waste products utilization of coal benefication process with the aim of decreasing greenhouse gases emissions into the atmosphere at the sludge depository of MEP Slavianoserbska" Project in Rodakove village, Slovyanoserbskyi district Luhansk Region, 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 SIA "Vidzeme Eko" 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 and Verification Plan indicated in the final PDD version 2.0. 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 XX for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

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

Reporting period: From 01/10/2008 to 31/08/2012				
Baseline emissions	: 5055144	tonnes of CO <sub>2</sub> equivalent.		
Project emissions	: 76449	tonnes of CO <sub>2</sub> equivalent.		
Leakages	: -2410663	tonnes of CO <sub>2</sub> equivalent.		
Emission Reductions	: 7 389 358	tonnes of CO2 equivalent.		

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EMISSIONS INTO THE ATMOSPHERE A		
SLAVIANOSERBSKA	AT THE SLODGE D	EFOSITORT OF MET
SEAVIANOSERBSRA		
From 01/10/2008 to 31/12/2008		
Baseline emissions	: 233102	tonnes of CO2 equivalent.
Project emissions	: 3405	tonnes of CO <sub>2</sub> equivalent.
Leakages	: -111693	tonnes of CO <sub>2</sub> equivalent.
Emission Reductions	: 341390	tonnes of CO <sub>2</sub> equivalent.
From 01/01/2009 to 31/12/2009		
Baseline emissions	: 1302634	tonnes of CO2 equivalent.
Project emissions	: 19229	tonnes of CO <sub>2</sub> equivalent.
Leakages	: -611488	tonnes of CO <sub>2</sub> equivalent.
Emission Reductions	: 1904893	tonnes of CO <sub>2</sub> equivalent.
	1 100 1000	
From 01/01/2010 to 31/12/2010		
Baseline emissions	: 1299396	tonnes of CO2 equivalent.
Project emissions	: 19550	tonnes of CO <sub>2</sub> equivalent.
Leakages	: -628055	tonnes of CO <sub>2</sub> equivalent.
Emission Reductions	: 1907901	tonnes of CO <sub>2</sub> equivalent.
		, , , , , , , , , , , , , , , , , , ,
From 01/01/2011 to 31/12/2011		
Baseline emissions	: 1305035	tonnes of CO <sub>2</sub> equivalent.
Project emissions	: 19534	tonnes of CO <sub>2</sub> equivalent.
Leakages	: -616907	tonnes of CO2 equivalent.
Emission Reductions	: 1902408	tonnes of CO2 equivalent.
From 01/01/2012 to 31/08/2012		
Baseline emissions	: 914977	tonnes of CO2 equivalent.
Project emissions	: 14731	tonnes of CO <sub>2</sub> equivalent.
Leakages	: -432520	tonnes of CO <sub>2</sub> equivalent.
Emission Reductions	: 1332766	tonnes of CO2 equivalent.
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# 5 REFERENCES

#### **Category 1 Documents:**

Documents provided by SIA "Vidzeme Eko" that relate directly to the GHG components of the project.

- /1/ Project Design Document "Waste products utilization of coal benefication process with the aim of decreasing greenhouse gases emissions into the atmosphere at the sludge depository of MEP Slavianoserbska" version 2.0 dated 25/09/2012
- /2/ Monitoring Report "Waste products utilization of coal benefication process with the aim of decreasing greenhouse gases emissions into the atmosphere at the sludge depository of MEP Slavianoserbska" version 1.0 dated 03/10/2012
- /3/ Monitoring Report "Waste products utilization of coal benefication process with the aim of decreasing greenhouse gases emissions into the atmosphere at the sludge depository of MEP Slavianoserbska" version 2.0 dated 24/10/2012
- /4/ ERUs calculation file "CalculationRodakivskeK.xls"
- /5/ Letter of Approval #2928/23/7 dated 05/10/2012 issued by State Environment Investment Agency of Ukraine
- /6/ Letter of Approval #12.2-02/12395 dated 04/09/2012 issued by Ministry of Environment Protection and Regional Development of Republic Latvia

### Category 2 Documents:

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

- /1/ Passport. Automobile scales electronic tensometric VTA-60
- /2/ Delivery contract of Carbonaceous fraction between "MERIDIAN 2008" Ltd and "AMG DEVELOPMENT" Ltd #204 from 26/08/2008 (in Russian).
- /3/ Delivery contract of Carbonaceous fraction between "MIRTA-LUX" Ltd. and "TH ICC REGION-STAL" Ltd # 54 from 03/01/2012 (in Russian)..
- /4/ Agreement of subcontract # 268 from 26/08/2008 between "MERIDIAN 2008" Ltd and "ASKANIYA 2008" Ltd on the works of the dump dismantling
- /5/ Agreement of subcontract # 72 from 03/01/2012 between "MIRTA-LUX" Ltd. and "FINANS-MEDIA" Ltd on the works of the dump dismantling
- /6/ Agreement of subcontract # 126 from 26/08/2008 between CE "Vtormet" Ltd.(Customer) and ""MERIDIAN 2008" Ltd.(Performer) on the works of the dump dismantling
- /7/ Agreement of subcontract # 191 from 03/01/2008 between CE "Vtormet" Ltd.(Customer) and "MIRTA-LUX" Ltd. (Performer) on the works of the dump dismantling
- /8/ Act of performed work of weighing from 01/11/09 of 296083 tons of carbonaceous rocks



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- /9/ Act of admission and transmission of performed work from 01/11/09 for 27100241,92 UAH. and calculation of the costs for the act of performed works.
- /10/ Sales invoice# 61 for 109551 tons of Carbonaceous rocks
- /11/ Act of performed work of weighing from 01/04/10 of 298161 tons of carbonaceous rocks
- /12/ Act of admission and transmission of performed work from 01/04/10 for 27300199,93 UAH. and calculation of the costs for the act of performed works.
- /13/ Sales invoice# 43 for 110320 tons of Carbonaceous rocks
- /14/ Act of performed work of weighing from 01/10/10 of 305523 tons of carbonaceous rocks
- /15/ Act of admission and transmission of performed work from 01/10/10 for 27974278,80 UAH. and calculation of the costs for the act of performed works.
- /16/ Sales invoice#102 for 113044 tons of Carbonaceous rocks
- /17/ Act of performed work of weighing from 01/02/11 of 295758 tons of carbonaceous rocks
- /18/ Act of admission and transmission of performed work from 01/02/11 for 27052313,40 UAH. and calculation of the costs for the act of performed works
- /19/ Sales invoice# 24 for 109431 tons of Carbonaceous rocks
- /20/ Act of performed work of weighing from 01/11/11 of 299455 tons of carbonaceous rocks
- /21/ Act of admission and transmission of performed work from 01/11/11 for 27390471,47 UAH. and calculation of the costs for the act of performed works.
- /22/ Sales invoice# 99 for 110798 tons of Carbonaceous rocks
- /23/ Act of performed work of weighing from 01/05/12 of 324000 tons of carbonaceous rocks
- /24/ Act of admission and transmission of performed work from 01/05/12 for 30091086,82 UAH. and calculation of the costs for the act of performed works.
- /25/ Sales invoice# 60 for 119880 tons of Carbonaceous rocks
- /26/ Results on mine surveyor measures of MEP Slovyanoserbska slurry pond
- /27/ Technological scheme of "Skhidnoukrainska zbagachuvalna kompaniya" plant

### 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/ Gints Klavinsh SIA "Vidzeme Eko" JI Project Manager
- /2/ Tymofeev Sergiy Petrovych SIA "Vidzeme Eko" JI Consultant
- /3/ Stah Yuri Mykhailovych SIA "Vidzeme Eko" JI Consultant
- /4/ Olena Mykolaivna Petrenko PE "Tandem 2006" Ltd. Head of Laboratory, subcontractor of PE "SPETSMONTAZH FC"
- /5/ Petro Hryhorovych Sydelnykov "FINANS-MEDIA" Ltd. Production Manager, PE "SPETSMONTAZH FC"
- /6/ Lyudmyla Fedorivna Morozova "MIRTA-LUX" Ltd. manager of TCD, PE "SPETSMONTAZH FC"
- /7/ Andriy Folts head of PE "SPETSMONTAZH FC"

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### APPENDIX A: VERIFICATION PROTOCOL VERIFICATION PROTOCOL

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

DVM Paragrap h	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project app	provals 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?	The project was approved by Latvia Republic, the Party-buyer of ERUs. Letter of Approval #12.2- 02/12395 has been issued 04.09.2012 <u>CAR01</u> Please provide written approval from the Ukraine <u>CL01</u> Please clarify name of the Latvian DFP issued Letter of Approval	CAR01 CL01	OK OK
91	Are all the written project approvals by Parties involved unconditional?	Letter of approval from the Latvia is unconditional	ОК	ОК
Project imp	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?	<u>CAR02</u> The MR indicates in the section A.7 table 1 that values of ERUs obtained in 2012 year is differ than indicated in the PDD by difference in monitoring period duration. This is not fully reasonably, because values in PDD for 2012 year are obtained on the basis of ex-post estimations and data for 8 months of 2012 is factual. Please provide adequate explanation	CAR02	ОК
93	What is the status of operation of the project during the monitoring period?		CAR03	ОК



DVM Paragrap h	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		concentrate) are provided in the sections B.2.3 and B.2.4 <u>CAR03</u> Please add in the MR description of implemented project measures and note if any additional equipment was installed during the monitoring period		
-	e with monitoring plan			
94	Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	The monitoring was provided in accordance with the monitoring plan included in the PDD which is determined and available on UNFCCC website	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?	Key factors listed in the section 23 (b) (i)-(vii) of DVM influencing the baseline emissions and the activity level of the project, as well as the risks associated with the project are taken into account	ОК	ОК
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	The data sources used for calculating the emission reduction are clearly identified, reliable and transparent. <u>CAR04</u> The determined PDD indicates that emissions from electricity consumption by coal enrichment at benefication plant are calculated by average value of electricity consumed per tonne of coal concentrate. MR	CAR04	ОК



DVM Paragrap h	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		indicates that direct monitoring of electricity consumed value take place. Please correct this misamendment or revise the monitoring plan		
95 (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?	The emission factors used for emission reduction calculations are used in line with National GHG Inventory Report for 1990-2011 years, approved by SEIA <u>CAR05</u> Please correct designation of units in the section B.2.1	CAR05	ОК
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	The calculation of emission reductions are based on conservative assumptions and the most plausible future scenarios	ОК	ОК
Applicable	to JI SSC projects only_Not applicable			
	to bundled JI SSC projects only_Not appli	cable		
	f monitoring plan			
	only if monitoring plan is revised by proje			
99 (a)	appropriate justification for the proposed revision?	The Project participants don't revised monitoring plan which is determined and included in the MR version 1.0	OK	OK
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?	Not applicable	ОК	OK



Check Item	Initial finding	Draft Conclusion	Final Conclusion
gement			
Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	The implementation of data collection procedures is in line with the monitoring plan, including quality control and quality assurance procedures	OK	OK
Is the function of the monitoring equipment, including its calibration status, in order?	<u>CAR06</u> Automobile scales VAT-60 s/n 673 is indicated in the PDD. These scales are installed 15/05/2008 and duration of the intercalibration interval is 12 months. Please add data on scales calibration in 2009 and 2010 years <u>CAR08</u> Please provide full list of laboratory equipment with data on calibrations and replacement of measuring devices	CAR06 CAR08	ОК ОК
Are the evidence and records used for the monitoring maintained in a traceable manner?		ОК	ОК
Is the data collection and management system for the project in accordance with the monitoring plan?	The data collection and management system is in line within the monitoring plan <u>CAR07</u> Please indicate in the MR that data monitored and required for ERUs calculations will be kept two years after the last ERUs transfer and provide reference on	CAR07	ОК
	gement Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures? Is the function of the monitoring equipment, including its calibration status, in order? Are the evidence and records used for the monitoring maintained in a traceable manner? Is the data collection and management system for the project in accordance with	gementIs the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?The implementation of data collection procedures is in line with the monitoring plan, including quality control and quality assurance procedures?Is the function of the monitoring equipment, including its calibration status, in order?CAR06 Automobile scales VAT-60 s/n 673 is indicated in the PDD. These scales are installed 15/05/2008 and duration of the intercalibration interval is 12 months. Please add data on scales calibration in 2009 and 2010 years CAR08 Please provide full list of laboratory equipment with data on calibrations and replacement of measuring devicesAre the evidence and records used for the monitoring maintained in a traceable manner?The evidences and records used for the or the project in accordance with the monitoring plan?Is the data collection and management system for the project in accordance with the monitoring plan?The data collection and management system is in line within the monitoring plan CAR07 Please indicate in the MR that data monitored and	gementConclusionIs the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?The implementation of data collection procedures is in line with the monitoring plan, including quality control and quality assurance procedures?OKIs the function of the monitoring equipment, including its calibration status, in order?CAR06 Automobile scales VAT-60 s/n 673 is indicated in the PDD. These scales are installed 15/05/2008 and duration of the intercalibration interval is 12 months. Please add data on scales calibration in 2009 and 2010 years CAR08CAR08Are the evidence and records used for the monitoring maintained in a traceable manner?The evidences and records used for the plan are obtained in a traceable plan are obtained in a traceable manner?OKIs the data collection and management system for the project in accordance with the monitoring plan?The data collection and management of the the monitoring planCAR07

# VERIFICATION REPORT: WASTE PRODUCTS UTILIZATION OF COAL BENEFICATION PROCESS WITH THE AIM OF DECREASING GREENHOUSE GASES EMISSIONS INTO THE ATMOSPHERE AT THE SLUDGE DEPOSITORY OF MEP SLAVIANOSERBSKA



### Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant Verification team conclusion response
<u>CAR01</u> Please provide written approval from the Ukraine	90	Provided, Section A.6.: Letter of approval from SEIA # 2928/23/7 from 05/10/2012 The issue is closed
<u>CAR02</u> The MR indicates in the section A.7 table 1 that values of ERUs obtained in 2012 year is differ than indicated in the PDD by difference in monitoring period duration. This is not fully reasonably, because values in PDD for 2012 year are obtained on the basis of ex-post estimations and data for 8 months of 2012 is factual. Please provide adequate explanation	92	Project participants during the first 8 months in 2012 used actual data for calculations, and for the last 4 months - predictable. Therefore, in the monitoring report, which covers 8 months in 2012, the difference between values of emission reductions from the data in the PDD consists only of predictable reductions during the last 4 months in 2012.
<u>CAR03</u> Please add in the MR description of implemented project measures and note if any additional equipment was installed during the monitoring period	93	Added,SectionB.1:Forthemeasurementintheprojecttheequipmentisused,listedinTable 2,Section B.1.2.Projectequipmentused for the rock massThe issue is closedProjectequipmentused for the rock massmonitoring has not been replaced during theThe issue is closedmonitoringperiodandadditionalequipmentequipmenthas not beeninstalled.He



<u>CAR04</u> The determined PDD indicates that emissions from electricity consumption by coal enrichment at benefication plant are calculated by average value of electricity consumed per tonne of coal concentrate. MR indicates that direct monitoring of electricity consumed value take place. Please correct this misamendment or revise the monitoring plan	95(d)	Noted in Section B.2.5: Energy consumption and related emissions of greenhouse gases during benefication of coal extracted from the slurry pond are included in the calculation of leakage in the project scenario. Amount of electricity consumed in the process of benefication is calculated according to the balance of processing, in which is calculated the quantity of coal concentrate obtained in the process of benefication of waste products (slurry), and calculation of electricity consumption in the process considering electrical equipment involved in the project (see Annex 4 PDD).Thus, the differences between plans of emission accounting due to electricity consumption in PDD and monitoring report does not exist.	The issue is closed
<u>CAR05</u> Please correct designation of units in the section B.2.1	95(c)	Corrected, Section B.2.1:Designation of units: tCO <sub>2</sub> /MWh Розмірність в Розділі B.2.1. скориговано тCO <sub>2</sub> /МВт-год	The issue is closed



<u>CAR06</u> Automobile scales VAT-60 s/n 673 is indicated in the PDD. These scales are installed 15/05/2008 and duration of the intercalibration interval is 12 months. Please add data on scales calibration in 2009 and 2010 years	101(b)	Dates on scale calibration are added in table 2, Section B.1.2: 07/05/2009 30/04/2010 08/01/2011 23.09.2011	The issue is closed
<u>CAR07</u> Please indicate in the MR that data monitored and required for ERUs calculations will be kept two years after the last ERUs transfer and provide reference on relevant order	101(d)	Noted, Section B.3.: Documents and other data monitored and required for determination and verification, as well as any other data that are relevant to the operation of the project, will be kept for at least two years after the last transfer of ERUs.	The issue is closed
<u>CAR08</u> Please provide full list of laboratory equipment with data on calibrations and replacement of measuring devices	101(b)	Table 2 Section B.1.2: full list of project measuring equipment with data on calibrations and replacement of measuring devices is provided	The issue is closed
<u>CL01</u> Please clarify name of the Latvian DFP issued Letter of Approval	90	Clarified: Letter of approval from foreign country (issued by Ministry of Environmental Protection and Regional Development of the Republic Latvia)	The issue is closed