



# VERIFICATION REPORT SIA "VIDZEME EKO"

## VERIFICATION OF THE DISMANTLING OF WASTE HEAP AT "NOVOPAVLOVSKA" MINE

REPORT No. UKRAINE-VER/0664/2012

REVISION No. 01

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT: DISMANTLING OF WASTE HEAP AT "NOVOPAVLOVSKA" MINE

|                                    |  |
|------------------------------------|--|
| Date of first issue:<br>14/10/2012 | Organizational unit:<br>Bureau Veritas Certification Holding SAS |
| Client:<br>SIA "Vidzeme Eko"       | Client ref.:<br>Victor Tkachenko                                 |

**Summary:**  
Bureau Veritas Certification has made the initial and 1<sup>st</sup> periodic verification of the "Dismantling of waste heap at "Novopavlovskia" mine", project of SIA "Vidzeme Eko" located in Krasnyi Luch town, Antracite 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 per determined changes. 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 1713559 tonnes of CO<sub>2</sub> equivalent for the monitoring period from 02/01/2009 to 30/09/2012 (416717 tonnes of CO<sub>2</sub> eq for 02/01/2009-31/12/2009, 440417 tonnes of CO<sub>2</sub> eq for 01/01/2010-31/12/2010, 425806 tonnes of CO<sub>2</sub> eq for 01/01/2011-31/12/2011, 430619 tonnes of CO<sub>2</sub> eq for 01/01/2012-30/09/2012).

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.:<br>Ukraine-ver/0664/2012   | Subject Group:<br>JI |
| Project title:<br>Dismantling of waste heap at "Novopavlovskia" mine   |                      |
| Work carried out by:<br>Vyacheslav Yeriomin – Team Leader, Lead Verifier<br>Vasyl Kobzar – Team member, technical specialist |                      |
| Work reviewed by:<br>Ivan Sokolov - Technical Reviewer<br>Dmytro Balyn – technical specialist                                |                      |
| Work approved by:<br>Ivan Sokolov - Operational Manager  |                      |
| Date of this revision:<br>25/10/2012   | Rev. No.:<br>01      |
| Number of pages:<br>21   |                      |

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## 1 INTRODUCTION

SIA "Vidzeme Eko" has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Dismantling of waste heap at "Novopavlovskia" mine" (hereafter called "the project") at Krasnyi Luch town, Antracite 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

Vasyl Kobzar  
Bureau Veritas Certification      Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov  
Bureau Veritas Certification,      Internal Technical Reviewer



Dmytro Balyn  
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 06/09/2012 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 CE "Vtormet" and SIA "Vidzeme Eko" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

**Table 1 Interview topics**

| Interviewed organization        | Interview topics   |
|---------------------------------|--|
| CE "Vtormet"                    | <ul style="list-style-type: none"> <li>• Organizational structure</li> <li>• Responsibilities and authorities</li> <li>• Roles and responsibilities for data collection and 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> </ul> <p>➤ Internal audits and check-ups</p> |
| CONSULTANT<br>SIA "Vidzeme Eko" | <ul style="list-style-type: none"> <li>• Baseline methodology</li> <li>• Monitoring plan</li> <li>• Monitoring report</li> </ul> <p>➤ Excel spreadsheets</p>   |

### 2.3 Resolution of Clarification, Corrective and Forward Action Requests

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

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

- (a) Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;
- (b) Clarification request (CL), requesting the project participants to provide additional information for the Verification Team to assess compliance with the monitoring plan;
- (c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

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



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

### **3 VERIFICATION CONCLUSIONS**

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 9 Corrective Action Requests, 1 Clarification Request, 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 is no FAR available from determination process, provided by Bureau Veritas Certification.

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

The project was approved by both Parties Involved. Letter of Approval #2998/23/7 dated 11/10/2012 issued by State Environment Investment Agency of Ukraine. Letter of Approval 12.2-02/12398 dated 04/09/2012 issued by Ministry of Environment protection and regional development of Republic Latvia

The abovementioned written approval is unconditional.

Identified problem areas for project approvals by Parties Involved, project participants' responses and conclusions of Bureau Veritas Certification are described in Annex A (refer to CL01)

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

Proposed project provides complete dismantling of the dump at the former mine "Novopavlovskia" with further reclamation of the area by restoring its fertile layer. During dismantling of the dump, the rocks will be divided into fractions, which will be used for blending with steam coal and subsequently supplied to heat power plants and boiler houses for burning as fuel. After sorting, the large fractions will be used for building and repairing of roads. As the result, rock mass of the dump will be fully utilized, and the received coal will replace coal, which otherwise would have had to be mined. As the result of the project, the opportunity of self-

ignition of heap will be eliminated. An important component of the project is its second phase – complex reclamation of the area by restoring its fertile layer and full restoration of natural ecological community. This part of the project is required, but totally expensive, due to this mechanism of joint implementation was one of the prominent factors of the project from the beginning, and financial benefits as part of this mechanism considered one of the reasons of the project implementation.

CE "Vtormet" Ltd is engaged in the wholesale fuel industry and has considerable experience in excavation and mining, as well as in land reclamation and landscaping. CE "Vtormet" Ltd uses the dump of former "Novopavlovskaya" mine on a legitimate basis.

The project provides the assemblage and installation of sorting rock mass complex of dump of former mine "Novopavlovskaya" consisting of:

- Point of loading rock mass on Conveyor SP-202MS;
- -Point of sorting rock mass in classes 0-30 mm and 30 mm (vibrating inertial sifter GIL-52);
- Point of storage class 0-30 mm (sheds).

Class +30 mm is expected (as required under discharging tray of sifter) to be loaded in transports and delivered to customers for building and repairing of category 4-5 roads. Class 0-30 mm is expected to be loaded in transports, undergoes a mandatory procedure of weighting and is sent to the consumer for blending and subsequent combustion in the thermal power plants or boiler houses. Blending of fraction (0- 30) with a steam coal allows to realize the fine finishing of quality the energy coal to the requirements of Standard 4083-2002, without compromising the quality of fuel on the one hand, but resulting in saving valuable energy coal on the other hand

Technological scheme of the complex is described as follows:

The rock mass, after been dismantled bulldozers T-170 is delivered to the feeding conveyor SP-202 by frontal loader HK 632L. Before the delivery of rock mass on the belt conveyor, the moisture is applied (humidity of raw materials does not exceed 8%) with sprinklers.

After bulldozers, layer by layer, get to the height, where the entrance road can be made- the combined method is used for the dump dismantling; further dismantling is made by excavator EO-5126 with the direct rock loading on the conveyor, or on the intermediate site, where, with the help of the loader, the rock is delivered to the scraper conveyor SP – 202

Product of sorting class 0-30 through handling unit of sifter supplied on belt conveyor KLS. From the belt conveyor rock mass of class 0-30 mm through the handling unit of conveyor with built-in nozzles for humidification, emptied on the intermediate platform without significant accumulation, where loader HK 319L loads it in trucks or on a platform (warehouse) for storage. Warehouse is used if necessary without long-



term storage. From storage the rock mass 0-30 mm by loader is loaded into trucks

Data on waste heaps such a geographical coordinates, mass value of containing rocks, physical measures, main work characteristics of heavy transporting vehicles and equipment of coal beneficiation plant are provided in the PDD.

Data on main project parameters describing project implementation status, such as values of consumed diesel fuel and electricity, value of produced coal concentrate, are provided in the sections B.2.3 an B.2.4 of the Monitoring Report.

Waste heap dismantling and coal beneficiation was started in 2008. Crediting period for ERUs generation started 02/01/2009.

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.

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 for project implementation status, project participants' responses and conclusions of Bureau Veritas Certification are described in Annex A (refer to CAR01-CAR04)

### **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.

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

Identified problem areas for compliance of the monitoring plan with the, project participants' responses and conclusions of Bureau Veritas Certification are described in Annex A (refer to CAR05-CAR07).

### **3.5 Revision of monitoring plan (99-100)**

The project participants provided an appropriate justification for the proposed revision of the monitoring plan. Revised monitoring report uses for calculation in 2009 year value of diesel fuel net calorific value was adjusted according to the National Inventory Report of Ukraine 1990- 2010, p. 473, Mobile fuel combustion. Outdoor vehicles; the value 42.50 TJ/kt was changed on 42.30 TJ/kt.

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 are no problem issues identified applicable to the revision of project monitoring plan.

### **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. List of project measuring devices with data on calibration/replacement are provided in the section B.1.2 of 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, waste heap mass 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 "Mirta-Lux" LLC and "Tandem-2006" LLC 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 for project data management, responses of project participants, Bureau Veritas Certification conclusions are listed in the Annex A Verification protocol (see CAR08, CAR09)

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

"Not applicable"

## **4 VERIFICATION OPINION**

Bureau Veritas Certification has performed the initial, 1<sup>st</sup> periodic verification of the "Dismantling of waste heap at "Novopavlovsk" mine" Project in Krasnyi Luch town, Antracite 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 as per determined changes. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 2.0 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as per determined changes. 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 02/01/2009 to 30/09/2012

|                     |           |                           |
|---------------------|-----------|---------------------------|
| Baseline emissions  | : 1308291 | tonnes of CO2 equivalent. |
| Project emissions   | : 65332   | tonnes of CO2 equivalent. |
| Leakages            | : -470600 | tonnes of CO2 equivalent. |
| Emission Reductions | : 1713559 | tonnes of CO2 equivalent. |

From 02/01/2009 to 31/12/2009

|                     |           |                           |
|---------------------|-----------|---------------------------|
| Baseline emissions  | : 317124  | tonnes of CO2 equivalent. |
| Project emissions   | : 15838   | tonnes of CO2 equivalent. |
| Leakages            | : -115433 | tonnes of CO2 equivalent. |
| Emission Reductions | : 416717  | tonnes of CO2 equivalent. |

From 01/01/2010 to 31/12/2010

|                     |           |                           |
|---------------------|-----------|---------------------------|
| Baseline emissions  | : 335021  | tonnes of CO2 equivalent. |
| Project emissions   | : 16372   | tonnes of CO2 equivalent. |
| Leakages            | : -121768 | tonnes of CO2 equivalent. |
| Emission Reductions | : 440417  | tonnes of CO2 equivalent. |

From 01/01/2011 to 31/12/2011

|                     |           |                           |
|---------------------|-----------|---------------------------|
| Baseline emissions  | : 326279  | tonnes of CO2 equivalent. |
| Project emissions   | : 16535   | tonnes of CO2 equivalent. |
| Leakages            | : -116062 | tonnes of CO2 equivalent. |
| Emission Reductions | : 425806  | tonnes of CO2 equivalent. |

From 01/01/2012 to 30/09/2012

|                     |           |                           |
|---------------------|-----------|---------------------------|
| Baseline emissions  | : 329867  | tonnes of CO2 equivalent. |
| Project emissions   | : 16587   | tonnes of CO2 equivalent. |
| Leakages            | : -117337 | tonnes of CO2 equivalent. |
| Emission Reductions | : 430619  | tonnes of CO2 equivalent. |



## 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 "Dismantling of waste heap at "Novopavlovskia" mine" version 2.0 dated 21/09/2012
- /2/ Monitoring report "Dismantling of waste heap at "Novopavlovskia" mine" version 1.0 dated 11/10/2012
- /3/ Monitoring report "Dismantling of waste heap at "Novopavlovskia" mine" version 2.0 dated 25/10/2012
- /4/ Letter of Approval #2998/23/7 dated 11/10/2012 issued by State Environment Investment Agency of Ukraine
- /5/ Letter of Approval #12.2-02/12398 dated 04/09/2012 issued by Ministry of Environment Protection and Regional Development of Republic Latvia
- /6/ ERUs calculation Excel-file "Calculation\_NovopavlovskiaK.xls"

### Category 2 Documents:

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

- /1/ Act of admission and transmission of the waste heap from 03/11/2008 between PSE "Nova Epoha" and CE "Vtormet" Ltd.
- /2/ Agreement # 3/11/08-2 from 03/11/2008 between PSE "Nova Epoha" and CE "Vtormet" Ltd.
- /3/ Delivery contract of Carbonaceous fraction between "MERIDIAN 2008" Ltd. and "AMG DEVELOPMENT" Ltd. # 813 from 03/11/2008 (in Russian).
- /4/ Delivery contract of Carbonaceous fraction between "MIRTA-LUX" Ltd. and "TH ICC REGION-STAL" Ltd # 3218 from 03/01/2012 (in Russian).
- /5/ Agreement of subcontract # 802 from 03/11/2008 between "MERIDIAN 2008" Ltd and "ASKANIYA 2008" Ltd. on the works of the dump dismantling
- /6/ Agreement of subcontract # 330 from 03/01/2012 between "MIRTA-LUX" Ltd. and "FINANS-MEDIA" Ltd on the works of the dump dismantling
- /7/ Agreement of subcontract # 811 from 03/11/2008 between CE "Vtormet" Ltd.(Customer) and "MERIDIAN 2008" Ltd.(Performer) on the works of the dump dismantling
- /8/ Agreement of subcontract # 211 from 03/01/2012 between CE "Vtormet" Ltd.(Customer) and "MIRTA-LUX" Ltd. (Performer) on the works of the dump dismantling
- /9/ Act of performed work of weighing from 01/06/09 of 44603.45 tons of carbonaceous rocks
- /10/ Act of admission and transmission of performed work from 01/06/09 for 5777723.52 UAH. and calculation of the costs for the act of performed works.
- /11/ Sales invoice# 28 for 44603.45 tons of Carbonaceous rocks.



- /12/ Act of performed work of weighing from 01/04/10 of 43311.65 tons of carbonaceous rocks.
- /13/ Act of admission and transmission of performed work from 01/04/10 for 5683362.28 UAH. and calculation of the costs for the act of performed works.
- /14/ Sales invoice# 28 for 43311.65 tons of Carbonaceous rocks.
- /15/ Act of performed work of weighing from 01/10/10 of 44381.05 tons of carbonaceous rocks
- /16/ Act of admission and transmission of performed work from 01/10/10 for 5820886.42UAH. and calculation of the costs for the act of performed works.
- /17/ Sales invoice# 78 for 44381.05 tons of Carbonaceous rocks.
- /18/ Act of performed work of weighing from 01/02/11 of 43094.45 tons of carbonaceous rocks.
- /19/ Act of admission and transmission of performed work from 01/02/11 for 5705531.08 UAH. and calculation of the costs for the act of performed works.
- /20/ Sales invoice# 12 for 43094.45 tons of Carbonaceous rocks.
- /21/ Act of performed work of weighing from 01/11/11 of 43633.05 tons of carbonaceous rocks.
- /22/ Act of admission and transmission of performed work from 01/11/11 for 5775363.07 UAH. and calculation of the costs for the act of performed works.
- /23/ Sales invoice for 43633.05 tons of Carbonaceous rocks.
- /24/ Act of performed work of weighing from 01/05/12 of 44209.75 tons of carbonaceous rocks.
- /25/ Act of admission and transmission of performed work from 01/05/12 for 5884175.38 UAH. and calculation of the costs for the act of performed works.
- /26/ Sales invoice# 36 for 44209.75 tons of Carbonaceous rocks.
- /27/ Passport . Automobile electronic scales tensometric VTA-60

**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" Ltd. Head of Laboratory, subcontractor of "PE "Vtormet"" LLC
- /5/ Petro Hryhorovych Sydelnykov - "FINANS-MEDIA" Ltd. Production Manager, subcontractor of "PE "Vtormet"" LLC
- /6/ Lyudmyla Fedorivna Morozova - "MIRTA-LUX" Ltd. manager of TCD, subcontractor of "PE "Vtormet"" LLC



VERIFICATION REPORT: DISMANTLING OF WASTE HEAP AT "NOVOPAVLOVSKA" MINE

## APPENDIX A: VERIFICATION PROTOCOL

### VERIFICATION PROTOCOL

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

| DVM Paragraph                                | Check Item  | Initial finding  | Draft Conclusion                 | Final Conclusion     |
|--|---|--|----------------------------------|----------------------|
| <b>Project approvals by Parties involved</b> |   |  |                                  |                      |
| 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 both Parties involved. Letter of Approval #2998/23/7 dated 11/10/2012 has been issued by State Environment Investment Agency. Letter of Approval 12.2-02/12398 has been issued 04.09.2012 by Respublic Latvia<br><u>CL01</u><br>Please clarify name of Latvian DFP   | CL01                             | OK                   |
| 91   | Are all the written project approvals by Parties involved unconditional?  | The written project approvals are unconditional  | OK                               | OK                   |
| <b>Project implementation</b>                |   |  |                                  |                      |
| 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>CAR01</u><br>Please provide reference on PDD published at UNFCCC website<br><u>CAR02</u><br>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 | CAR01<br>CAR02<br>CAR03<br>CAR04 | OK<br>OK<br>OK<br>OK |



## VERIFICATION REPORT: DISMANTLING OF WASTE HEAP AT "NOVOPAVLOVSKA" MINE

| DVM Paragraph                          | Check Item  | Initial finding   | Draft Conclusion | Final Conclusion |
|--|---|---|------------------|------------------|
|  |   | <u>CAR03</u><br>Please add in the MR description of implemented project measures and note if any additional equipment was installed during the monitoring period<br><u>CAR04</u><br>Please add more detailed information on roles and responsibilities of the third parties involved in the project                         |                  |                  |
| 93                                     | What is the status of operation of the project during the monitoring period?  | The project is in operation during the monitoring period  | OK               | OK               |
| <b>Compliance with monitoring plan</b> |   |   |                  |                  |
| 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 published at UNFCCC website and which determination has been deemed final<br><u>CAR05</u><br>New value of net calorific value of diesel fuel was used for calculations in 2009 year. Please add revision of monitoring plan | CAR05            | OK               |
| 95 (a)                                 | For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) above, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate? | 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   | OK               | OK               |
| 95 (b)                                 | Are data sources used for calculating   | The data sources used for calculating the emission  | CAR06            | OK               |



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| DVM Paragraph   | Check Item   | Initial finding   | Draft Conclusion | Final Conclusion |
|---|--|---|------------------|------------------|
|   | emission reductions or enhancements of net removals clearly identified, reliable and transparent?  | reduction are clearly identified, reliable and transparent.<br><u>CAR06</u><br>Please provide correct references on pages of NIR containing values of diesel fuel NCV and coal content in 2009-2010 years                           |                  |                  |
| 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 1990-2010 years, approved by SEIA<br><u>CAR07</u><br>Please correct designation of units in the section B.2.1 | CAR07            | OK               |
| 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  | OK               | OK               |
| <b>Applicable to JI SSC projects only_Not applicable</b>                    |  |   |                  |                  |
| <b>Applicable to bundled JI SSC projects only_Not applicable</b>            |  |   |                  |                  |
| <b>Revision of monitoring plan</b>  |  |   |                  |                  |
| <b>Applicable only if monitoring plan is revised by project participant</b> |  |   |                  |                  |
| 99 (a)  | Did the project participants provide an appropriate justification for the proposed revision?   | the project participants provides adequate justification for the proposed revision  | 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  | The proposed revision improves the accuracy of data calculated comparing to the original monitoring plan without changes of relevant rules and regulations  | OK               | OK               |



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| DVM Paragraph   | Check Item  | Initial finding  | Draft Conclusion | Final Conclusion |
|---|---|--|------------------|------------------|
|   | conformity with the relevant rules and regulations for the establishment of monitoring plans?   |  |                  |                  |
| <b>Data management</b>  |   |  |                  |                  |
| 101 (a)   | 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               |
| 101 (b)   | Is the function of the monitoring equipment, including its calibration status, in order?  | <u>CAR08</u><br>Please provide full list of project measuring equipment with data on calibrations and replacement of measuring devices   | CAR08            | OK               |
| 101 (c)   | Are the evidence and records used for the monitoring maintained in a traceable manner?  | The evidences and records used for the monitoring are 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?  | <u>CAR09</u><br>Please note in the MR that the data monitored and required for ERUs calculations will be kept two years after the last ERUs transfer and provide reference on relevant order | CAR09            | OK               |
| <b>Verification regarding programmes of activities (additional elements for assessment) _Not applicable</b> |   |  |                  |                  |
| <b>Applicable to sample-based approach only _Not applicable</b>   |   |  |                  |                  |



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

| Draft report clarification and corrective action requests by verification team  | Ref. to checklist question in table 1 | Summary of project participant response   | Verification team conclusion |
|---|---------------------------------------|---|------------------------------|
| <p><u>CAR01</u><br/>Please provide reference on PDD published at UNFCCC website</p>   | 92                                    | <p>Provided, Section A.7: reference on PDD published at UNFCCC website :<br/><a href="http://ji.unfccc.int/JIITLProject/DB/E87JSRFB4P91IKCZ861J8ZYAQAQGUJ/details">http://ji.unfccc.int/JIITLProject/DB/E87JSRFB4P91IKCZ861J8ZYAQAQGUJ/details</a></p>  | <b>The issue is closed</b>   |
| <p><u>CAR02</u><br/>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 reasonable, 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</p> | 92                                    | <p>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.</p> | <b>The issue is closed</b>   |
| <p><u>CAR03</u><br/>Please add in the MR description of implemented project measures and note if any additional equipment was installed during the monitoring period</p>  | 92                                    | <p>Added, Section B.1: For the measurement in the project the equipment is used, listed in Table 2, Section B.1.2.<br/>Project equipment used for the rock mass sorting has not been replaced during the monitoring period and additional equipment has not been installed.</p>   | <b>The issue is closed</b>   |



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|   |                  |   |                                   |
|---|------------------|---|-----------------------------------|
| <p><u>CAR04</u><br/>Please add more detailed information on roles and responsibilities of the third parties involved in the project</p> | <p><b>92</b></p> | <p>Provided, Section B.1.4 : Centers of metrology and standardization: SC «Luhanskstandartmetrologia», SC «Donetsk SPC Standardization, Metrology and Certification», SC «Ukrmetrteststandart», SC «Lvivstandartmetrologia», DTK «TZGO», StC «Poltavastandartmetrologia »<br/>Contractors of dismantling and sorting of the waste heap: "MIRTA LUX" Ltd.;<br/>Renter of weighing works: "FINANS-MEDIA" Ltd.;<br/>Conducting the chemical analysis: "Tandem 2006" Ltd. Expert reports: Scientific Research Institute of Mine-Rescue and Fire Safety "Respirator"<br/>Licenced designer EIA "Alfa Energo" Ltd. (License # AB315389 from 20/04/07)</p> | <p><b>The issue is closed</b></p> |
|---|------------------|---|-----------------------------------|



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|  |        |   |                     |
|--|--------|---|---------------------|
| <u>CAR05</u><br>New value of net calorific value of diesel fuel was used for calculations in 2009 year. Please add revision of monitoring plan | 94     | Noted in Section A.7. : The actual emissions reduction in the monitoring report in 2009 is slightly different from the predictions in the registered PDD by 51tCO <sub>2</sub> e, because diesel fuel net calorific value was adjusted according to the National Inventory Report of Ukraine 1990- 2010, p. 473, Mobile fuel combustion. Outdoor vehicles; the value 42.50 TJ/kt was changed on 42.30 TJ/kt In PDD, Table 23 “List of parameters and constants used in the calculations of emissions” noted that during the monitoring period the value can be changed, therefore revision of the monitoring plan is not required. Moreover, the difference between the values of emission reductions does not exceed 0.1% of the total number of ERUs. | The issue is closed |
| <u>CAR06</u><br>Please provide correct references on pages of NIR containing values of diesel fuel NCV and coal content in 2009-2010 years     | 95(b)  | Table 4: references on pages of NIR containing values of diesel fuel NCV and coal content in 2008 year is deleted.  | The issue is closed |
| <u>CAR07</u><br>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  | The issue is closed |
| <u>CAR08</u><br>Please provide full list of project measuring 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 |



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|  |        |  |                     |
|--|--------|--|---------------------|
| <p><u>CAR09</u><br/>Please note in the MR that the data monitored and required for ERUs calculations will be kept two years after the last ERUs transfer and provide reference on relevant order</p> | 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 |
| <p><u>CL01</u><br/>Please clarify name of Latvian DFP</p>  | 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 |