DETERMINATION REPORT
SIA "VIDZEME EKO"

DETERMINATION OF THE

"WASTE HEAP DISMANTLING BY PE ICC "TEFIDA" WITH THE AIM OF DECREASING GREENHOUSE GASES EMISSIONS INTO THE ATMOSPHERE"

REPORT NO. UKRAINE-DET/0541/2012

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BUREAU VERITAS CERTIFICATION

Report No: UKRAINE-det/0541/2012

DETERMINATION REPORT: "WASTE HEAP DISMANTLING BY PE ICC "TEFIDA" WITH THE AIM OF DECREASING GREENHOUSE GASES EMISSIONS INTO THE ATMOSPHERE"

Date of first issue:	Organizational unit:
14/06/2012	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
SIA "Widzeme-Eko"	Gennadyi Ivanenko

Summary:
Bureau Veritas Certification has made the determination of the "Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere" project of SIA "Vidzeme Eko" located in Shakhtarsk town, Donetsk Region, Ukraine 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 determination scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of 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 determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the determination process is a list of Clarification and Corrective Action Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies Guidance on criteria for baseline setting and monitoring and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report No.:	Subject Group:
UKRAINE-det/0541/2012	JI

Project title:
"Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere"

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Bureau Veritas Certification Holding SAS

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1 INTRODUCTION

SIA "Widzeme-Eko" has commissioned Bureau Veritas Certification to determine its JI project "Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere" (hereafter called "the project") at Shakhtarsk town, Donetsk Region, Ukraine.

This report summarizes the findings of the determination 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

The determination serves as project design verification and is a requirement of all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are determined in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emission reduction units (ERUs).

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 determination scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

The determination is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

1.3 Determination team

The determination team consists of the following personnel:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Verifier

Vyacheslav Yeriomin

Bureau Veritas Certification Team Member, Climate Change Verifier

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal reviewer

Nikolay Chekmestrenko
Bureau Veritas Certification, Technical Specialist

2 METHODOLOGY

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

In order to ensure transparency, a determination 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 determination and the results from determining the identified criteria. The determination protocol serves the following purposes:

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

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

2.1 Review of Documents

The Project Design Document (PDD) submitted by SIA "Widzeme-Eko" and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint implementation project design document form, Approved CDM methodology and/or Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, SIA "Widzeme-Eko" revised the PDD and resubmitted it on 14/06/2012.

The determination findings presented in this report relate to the project as described in the PDD version 2.1.

2.2 Follow-up Interviews

On 30/05/2012 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 ICC "Tefida" and SIA "Widzeme-Eko" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
PE ICC "Tefida"	➢ Project History ➢ Project Approach ➢ Project boundary ➢ Implementation Schedule ➢ Organization structure ➢ Authorities and responsibilities ➢ Training of personnel ➢ Quality management procedures and technologies ➢ Records on rehabilitation/implementation of equipment ➢ Metering equipment control ➢ Metering record keeping system, database ➢ Technical documentation ➢ Monitoring plan and procedures ➢ Permits and licenses
CONSULTANT SIA "Widzeme-Eko"	➢ Baseline methodology ➢ Monitoring plan ➢ Additionality proofs ➢ Calculation of emission reductions

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination 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 project design.

If the determination team, in assessing the PDD and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to JI project requirements, it will 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 in the published PDD that is not in accordance with the (technical) process used for the project or relevant JI project requirement or that shows any other logical flaw;

(b) Clarification request (CL), requesting the project participants to provide additional information for the determination team to assess compliance with the JI project requirement in question;

(c) Forward action request (FAR), informing the project participants of an issue, relating to project implementation but not project design, that needs to be reviewed during the first verification of the project.

The determination 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 determination.

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

3 PROJECT DESCRIPTION

The project provides the assemblage and installation of sorting rock mass complex of dump of "Shakhtarska – Glyboka" mine consisting of:

- Point of loading rock mass on Conveyor SP-202MS5;
- Point of sorting rock mass in classes 0-30 mm and 30 mm (vibrating inertial sifter GIL-52A6);
- Point of storage class 0-30 mm (shed)

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 (SPC "Oblpalyvo") 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 Standart 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 as follows:
The rock mass of disassembly dump is delivered to the feeding scraper conveyor SP-202 by Loader TO-28A with a bucket capacity of 2.5 m3. Humidification is applied (if the humidity of material doesn't exceed 8%) with sprinklers before the rock mass is delivered on the conveyor belt.
From the scraper conveyor through the handling unit the rock mass is fed to the sifter GIL-52A for the sorting into two classes - 0-30 mm and +30 mm. Productivity of the sifter on the original product is up to 200 tons / hour. Product of sifter screens +30 mm through the discharge tray, equipped with built-in nozzles for humidification, filled on the intermediate

platform without significant accumulation. From the intermediate platform this fraction by the loader Amkodor-342V loaded into trucks and transported to the consumer (for building and repairing of category 4-5 roads).

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 ZL-50F loaded 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.

The project capacity of the complex allows to process 700 000 m3 of rock per year.

The proposed project is aimed at reducing anthropogenic emissions. Emission reductions created by: - Elimination of greenhouse gases sources associated with burning waste heaps, by extracting coal from the rock dumps; - Reduction of uncontrolled methane emissions due to replacement of coal that would have been extracted through mining;
- Reduction of electricity consumption at waste heap dismantling in comparison to electricity consumption at coal mine.

4 DETERMINATION CONCLUSIONS

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

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

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A. The determination of the Project resulted in 11 Corrective Action Requests and 10 Clarification Requests and 1 Forward Action Request.

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

4.1 Project approvals by Parties involved (19-20)

The project has already received Letter of Endorsement #1491/23/7 dated 09/06/2012 issued by State Environmental Investment Agency.
The Bureau Veritas Certification obtained Letter of Endorsement from SIA "Widzeme-Eko" and doesn't doubt in its authenticity.

As for this time any written project approvals of the project from the Parties Involved are available. After receiving Determination Report from the Accredited Independent Entity (AIE) project documentation will be submitted to the Ukrainian Designated Focal Point (DFP) which is State Environment Investment Agency for receiving the Letter of Approval.
The written approvals from the other Parties will be obtained later on.

4.2 Authorization of project participants by Parties involved (21)

In accordance with paragraph 21 of the DVM the assessment of this area focuses on whether each of the legal entities listed as project participants in the PDD is authorized by a Party involved, which is also listed in the PDD, through: a written project approval by a Party involved, explicitly stating the name of the legal entity; or any other form of project participant authorization in writing, explicitly stating the name of the legal entity.
The following legal entities were listed as project participants in the PDD:
• PE ICC "Tefida";
• SIA "Vidzeme Eko".

The detailed information on project participants was indicated in section A.3 of the PDD. The contact information on project participants, explicitly stating the name of the legal entities, was provided in Annex 1 to the PDD.

Identified problem areas for authorization of project participants by Parties involved, project participants' responses and conclusions of Bureau Veritas Certification are described in Annex A to the Determination Report (refer to FAR 01)

4.3 Baseline setting (22-26)

The PDD explicitly indicates that using a methodology for baseline setting and monitoring developed in accordance with appendix B of the JI guidelines (hereinafter referred to as JI specific approach) was the selected approach for identifying the baseline.

The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline is established:

(a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:

Scenario 1. Continuation of existing situation

This scenario does not anticipate any activities and therefore does not face any barriers.

Scenario 2. Direct energy production from the heat energy of burning waste heap

Technological barrier:
This scenario is based on the highly experimental technology, which has not been implemented even in a pilot project. It is also not suitable for all waste heaps as the project owner will have to balance the energy resource availability (i.e. waste heap location) and the location of the energy
user. On-site generation of electricity addresses this problem but requires additional interconnection engineering. In general this technology has yet to prove its viability. In addition it does not allow the control and management of the emitted gases. This technology can be applied only in the presence of dumps with developed combustion center. Even if the probability of burning rock dump is very high, it is currently impossible to predict the time of its outbreak and therefore predict the start of the use of thermal energy released during its combustion.

Investment barrier:
Investment into unproven technology carries a high risk. In case of Ukraine, which carries a high country risk, investment into such unproven energy projects are less likely to attract investors than some other opportunities in the energy sector with higher returns. The pioneering character of the project may appeal to development programmes and governmental incentives but cost of the produced energy is likely to be much higher than alternatives.

Scenario 3. Production of construction materials from waste heap matter
Technological barrier:
This scenario is based on known technology, however, this technology is not currently available in Ukraine and there is no evidence that such projects will be implemented in the near future. It is also not suitable for all types of waste heaps as the content of waste heap has to be predictable in order for project owner to be able to produce quality materials. High contents of sulphur and moisture can reduce the suitability of the waste heap for processing. A large scale deep exploration of the waste heap has to be performed before the project can start.

Scenario 4. Coal extraction from waste heaps without JI incentives
Investment barrier: This scenario is financially unattractive and faces barriers. Detailed description of proposed scenario barriers is provided in the section B.2 of the PDD version 2.1.

Scenario 5. Systematic monitoring of waste heaps condition and regular fire prevention and extinguishing measures

Investment barrier: This scenario does not represent any revenues but anticipates additional costs for waste heaps owners. Monitoring of the waste heap status is not done systematically and in general actions are left to the discretion of the individual owners. Waste heaps are mostly owned by mines or regional coal mining associations. Coal mines in Ukraine suffer from limited investment resulting often in safety problems due to complicated mining conditions and financial constraints, with miners' salaries often being delayed by few months. Waste heaps in this situation are considered as additional burdens and mines often do not even perform minimum required maintenance. Exact data are not always available. From a commercial view point the fines that are usually levied by the authorities are considerably lower than costs of all the measures outlined by this scenario.

In this context, the Bureau Veritas Certification assessed whether the key factors that affect a baseline were taken into account. The project participants established the baseline taking into account the following key factors:

- sectoral reform initiatives;
- local fuel availability;
- power sector expansion plans;
- economic situation in the project sector.

The project participants applied the selected approach with transparency. Necessary information on approaches, assumptions, parameters, data sources and key factors is available in the PDD

Project participants used default values to the extent possible in order to reduce uncertainty and provide conservative data for emission calculations.
Also, conservative approach is the calculation of energy consumption, as the maximum possible consumption by 2-shift work of the main and auxiliary equipment throughout the year without exception.

According to the proposed approach emission reductions will be earned only within the project activity, so no emission reductions can be earned due to any changes outside the project activity or due to force majeure.
According to the described approach, emission reduction units shall be obtained only when due to the project boundaries coal will be extracted from the dump

Identified problem areas for baseline for baseline setting, project participants' responses and conclusions of Bureau Veritas Certification are described in Annex A (CAR 05, CAR 06, CL 07,CL 08).

4.4 Additionality (27-31)

The project "Dismantling of waste heap at former mine "ROZSYPNYANSKA-1" is selected as the comparable JI project. Accredited independent entity has already positively determined that it would result in a reduction of anthropogenic emissions by sources or an enhancement of net anthropogenic removals by sinks that is additional to any that would otherwise occur. This determination has already been deemed final by the JISC. Appropriate documentation such as PDD and Determination Report regarding this project is available traceably and transparently on the UNFCCC JI Website

http://ji.unfccc.int/JIITLProject/DB/0RQXGLUAS7ETAGMUQZWFQPJLN1SIAW/details

Additionality of the project was demonstrated adequately by demonstrating that the indicated project is comparable and implemented under comparable circumstances:

1) Both projects offer the same measures to reduce emissions: Proposed measures to reduce emissions by two projects - a removal of coal from mine dumps. This will not be allowed greenhouse gases to the atmosphere during the burning piles, and provided an additional amount of coal without mining at its mines.

2) Both projects are implemented in the same country: and the proposed project and determined comparable project are located in Ukraine.

3) Both projects use similar technologies: the technology used by the proposed project and determined comparable project is similar. In both projects, dumps are dismantling with standard forklifts and bulldozers. Material from dumps supplies to the place of sorting. Both projects have a sorting complex, in which the division of carbonaceous rocks into fractions takes place by vibrating. Small fraction of both projects is used for subsequent combustion in local boilers and thermal power station. Therefore, both technologies are similar.

4) Both projects have similar scale: both projects are large-scale JI projects. In both projects dumps reprocessing of comparable scale is accomplished. The proposed project is located and compared on the same site, which will work throughout the project. The scales of remote coal are limited by coal content in coal dumps and dumps size and are similar to the proposed and comparable projects - in both projects amount of sorted small fractions is ranging from 300.000 to 500.000 tons per year.

The desk review of provided information and follow-up interviews enabled Bureau Veritas Certification Holding SAS to assess that all explanations, descriptions and analyses in the demonstration of additionality were made in accordance with criteria of "Guidance on criteria for baseline setting and monitoring ",version 03" and this projects is indeed comparable project, implemented under comparable circumstances. The proposed JI activity provides the reductions in emissions by sources that are additional to any that would otherwise occur.

The problem areas for project's additionality were not identified

4.5 Project boundary (32-33)

The details on the project boundary were provided in section B.3 of the PDD. The desk review of submitted documentation enabled Bureau Veritas Certification to assess that the project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are:

- Under the control of the project participants;
- Reasonably attributable to the project; and
- Significant.

The baseline emission sources of GHGs that are included in the project boundaries are listed below. Emissions of carbon dioxide due to:
- Waste heap burning;
- Consumption of coal for energy production (excluded, does not take into the consideration in calculation).

The project emission sources of GHGs that were included in the project boundaries are listed below. Emissions of carbon dioxide due to:
- Consumption of electricity due to extracting coal from dump;
- Consumption of fossil fuel (diesel fuel) due to extracting coal from dump;
- Consumption of coal for energy production (excluded, does not take into the consideration in calculation).

Leakages:
- Fugitive emissions of methane in the mining activities;
- Consumption of electricity from a grid at coal mine.
- Use of other types of energy sources due to mining (excluded).

All gases and sources included in the project boundary were explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified and provided in Table 20 of the PDD.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD by using Figures 7-8 in section B.3 of the PDD.

The problem areas for project's boundaries were not identified

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began, and the starting date is 25/07/2008, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 4 years and 4 months (52 months).

The PDD states the length of the crediting period in years and months, which is 4 years and 4 months, and its starting date as 01/09/2008, which is on the date the first emission reductions or enhancements of net removals are generated by the project.

The PDD states that the crediting period for the issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project.

The PDD states that the extension of its crediting period beyond 2012 is subject to the host Party approval, and the estimates of emission reductions or enhancements of net removals are presented separately for those until 2012 and those after 2012 in all relevant sections of the PDD.

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach was the selected.

The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance, such as value of extracted coal, values of consumed electricity, diesel fuel.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. are clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions or enhancements of net removals to be monitored such as Net Calorific Value of Coal, Net calorific value of Diesel fuel, Carbon Oxidation Factor of Coal, Carbon Oxidation Factor of Diesel Fuel, Carbon content of coal, Carbon content of diesel fuel, Emission factor for fugitive methane emissions from coal mining, Specific carbon dioxide emissions due to production of electricity at TPP and by its

consumptions, The average ash content of coal produced in Donetsk region, the average moisture of coal produced in Donetsk Region, probability of waste heap burning, average electricity consumption per tonne of coal, produced in Ukraine.

The monitoring plan draws on the list of standard variables indicated in appendix B of "Guidance on criteria for baseline setting and monitoring" developed by the JISC.

The monitoring plan explicitly and clearly distinguishes:

(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination, such as Global Warming potential of the Methane, Methane Density, Net Calorific Value of Coal, Net calorific value of Diesel fuel, Carbon Oxidation Factor of Coal, Carbon Oxidation Factor of Diesel Fuel, Carbon content of coal, Carbon content of diesel fuel, Emission factor for fugitive methane emissions from coal mining, Specific carbon dioxide emissions due to production of electricity at TPP and by its consumptions, The average ash content of coal produced in Donetsk region, the average moisture of coal produced in Donetsk Region, probability of waste heap burning, average electricity consumption per tonne of coal, produced in Ukraine

(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination, such as absent.

(iii) Data and parameters that are monitored throughout the crediting period, such as Additional amount of electricity consumed in project, amount of diesel fuel consumed in project year, value of produced coal.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, such as direct monitoring of electricity consumption by meters, sampling of produced coal, etc. Description of employed methods is provided in the section D.1 of the PDD.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate, such as described below

The annual emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y, \quad (1)$$

where:

ER_y - emissions reductions of the JI project in year y (tCO2 equivalent);
BE_y - baseline emission in year y (tCO2 equivalent);
PE_y - project emission in year y (tCO2 equivalent);
LE_y - leakages in year y, (tCO2 equivalent).

Emissions in the baseline scenario are calculated as follows:

$$BE_y = BE_{WHB,y}\ , \quad (2)$$

Where:

$BE_{WHB,y}$ - baseline emissions due to burning of the waste heap in the year *y* (tCO2 equivalent),

Baseline emissions due to burning dumps in year y calculated by the formula:

$$BE_{WHB,y} = FC_{BE,Coal,y}/1000 \cdot \rho_{WHB} \cdot NCV_{Coal} \cdot OXID_{Coal} \cdot K_{Coal}^{c} \cdot 44/12 \quad (3)$$

where:

$FC_{BE,Coal,y}$ - amount of coal that has been mined in the baseline scenario and combusted for energy use, equivalent to the amount of coal extracted from the waste heap because of the project activity in the year *y,* t;

ρ_{WHB} - probability of waste heap burning , d/l;

NCV_{Coal} - net Calorific Value of coal, TJ/kt;

$OXID_{Coal}$ - carbon Oxidation factor of coal, d/l;

K_{Coal}^{c} - carbon content of coal, tC/TJ;

1/1000 - conversion factor from tons in kilotonnes, d / l

44/12 - stoichiometric relationship between the molecular weight of carbon dioxide and carbon.

The amount of coal produced in mines in the baseline scenario is calculated by the formula:

$$FC_{BE,Coal,y} = FR_{Coal,y} \cdot (1-A_{rock,y}/100-W_{rock,y}/100) \cdot (1-A_{Coal}/100-W_{Coal}/100) \quad (4)$$

where:

$FR_{Coal,y}$ - amount of sorted fraction (0-30mm), which is extracted from the dumps because of the project in a year y, that came to blending with further combustion in thermal power plants, t;

$A_{rock,y}$ - the average ash content of sorted fractions (0-30mm), which is extracted from dump in year y,%

$W_{rock,y}$ - the average humidity of sorted fractions (0-30mm), which is extracted from dump in year y, %;

A_{Coal} - the average ash content of coal, mined in Donetsk region of Ukraine, %;

W_{Coal} - the average humidity of coal, mined in Donetsk region of Ukraine, %;

100 - conversion factor from percent to fraction, d/l.

Emissions from the project activity are calculated as follows:

$$PE_y = PE_{EL,y} + PE_{Diesel,y} \quad (5)$$

where:
PE_y - project emissions due to project activity in the year *y* (tCO2 equivalent),
$PE_{EL,y}$ - project emissions due to consumption of electricity from the grid by the project activity in the year y (tCO2 equivalent),
$PE_{Diesel,y}$ - project emissions due to consumption of diesel fuel by the project activity in the year *y* (tCO2 equivalent).

The Project emissions due to consumption of electricity from a grid in a year y are calculated as follows:

$$PE_{EL,y} = EC_{PE,y} \cdot EF_{CO2,EL} \quad (6)$$

where:
$EC_{PE,y}$ - additional amount of electricity, consumed in project in year y, MWh;
$EF_{CO2,EL}$ - Specific carbon dioxide emissions due to production of electricity at TPP and by its consumption, tCO2/MWh;

Project emissions due to consumption of diesel fuel by the project activity in the year y are calculated as follows:

$$PE_{Diesel,y} = FC_{BE,Diesel,y}/1000 \cdot NCV_{Diesel} \cdot OXID_{Diesel} \cdot K_{Diesel}^{c} \cdot 44/12 \quad (7)$$

where:
$FC_{BE,Diesel,y}$ - amount of diesel fuel, consumed in project in year y, t;
NCV_{Diesel} - Net Calorific Value of diesel fuel, TJ/kt;
$OXID_{Diesel}$ - carbon Oxidation factor of diesel fuel, d/l;
K_{Diesel}^{c} - carbon content of diesel, tC/TJ;
44/12 - stoichiometric relationship between the molecular weight of carbon dioxide and carbon.
1/1000 - conversion factor from tons in kilotonnes, d / l

Leakages in year y are calculated as follows:

$$LE_y = LE_{CH4,y} + LE_{EL,y} \quad (8)$$

where::
LE_y - leakages in year y, (t CO2e);
$LE_{CH4,y}$ - leakages due to fugitive emissions of methane in the mining activities in the year *y*, (t CO2e);
$LE_{EL,y}$ - leakages due to consumption of electricity from a grid at coal mine in a year y,(t CO2e);

Leakages due to fugitive emissions of methane in the mining activities in the year *y* are calculated as follows:

$$LE_{CH4,y} = - FC_{BE,Coal,y} \cdot EF_{CH4} \cdot \rho_{CH4} \cdot GWP_{CH4}\ , \quad (9)$$

$FC_{BE,Coal,y}$ - amount of coal that has been mined in the baseline scenario and combusted for energy use, equivalent to the amount of coal extracted from the waste heaps because of the project activity in the year *y,* t, calculated as (4);
EF_{CH4} - emission factor for fugitive methane emissions from coal mining, m3/t;
ρ_{CH4} - methane density at standard conditions t/m3;
GWP_{CH4} - Global Warming Potential of Methane, tCO2/ tCH4.

Leakages due to consumption of electricity from a grid at coal mine in a year y are calculated as follows:

$$LE_{EL,y} = - FC_{BE,Coal,y} \cdot N_{Coal,y}^{E} \cdot EF_{CO2,EL,y} \quad (10)$$

Where
$FC_{BE,Coal,y}$ - amount of coal that has been mined in the baseline scenario and combusted for energy use, equivalent to the amount of coal extracted from the waste heaps because of the project activity in the year *y,* t, calculated as (2);
$N_{Coal,y}^{E}$ - Average electricity consumption per tonne of coal, produced in Ukraine in the year y, MWh/t;
$EF_{CO2,EL,y}$ - Specific carbon dioxide emissions due to production of electricity at TPP and by its consumption, tCO2/ MWh

The monitoring plan presents the quality assurance and control procedures for the monitoring process described in the section D.2 of the PDD. This includes, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available on request.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. Clear and transparent scheme of monitoring data flow is provided in the section D.3 of the PDD.

On the whole, the monitoring plan reflects good monitoring practices appropriate to the project type.

The monitoring plan provides, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature etc.) but not including data that are calculated with equations.

The monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

Identified problem areas for project monitoring plan, project participants' responses and conclusions of Bureau Veritas Certification are described in Annex A to the Determination Report (refer to CAR 07, CAR 08, CAR 09, CAR 10, CL 09, CL 10).

4.8 Leakage (40-41)

This project will result in a net change in fugitive methane emissions due to the mining activities. As coal in the baseline scenario is only coming from mines it causes fugitive emissions of methane. These are calculated as standard country specific emission factor applied to the amount of coal that is extracted from the waste heaps in the project scenario (which is the same as the amount of coal that would have been mined in the baseline scenario. Source of the leakage are the fugitive methane emissions due to coal mining. These emissions are specific to the coal that is being mined. Coal produced by the project activity is not mined but extracted from the waste heap through the advanced beneficiation process. Therefore, coal produced by the project activity substitutes the coal would have been otherwise mined in the baseline. Coal that is mined in the baseline has fugitive methane emissions associated with it and the coal produced by the project activity does not have such emissions associated with it.

As reliable and accurate national data on fugitive CH4 emissions associated with the production of coal are available, project participants used this data to calculate the amount of fugitive CH4 emission as described below.

This leakage is measurable: through the same procedure as used in 2006 IPCC Guidelines20 (See Volume 2, Chapter 4, Page 4-11) and also used in CDM approved methodology ACM009, Version 03.221 (Page 8). Activity data (in our case amount of coal extracted from the waste heap which is monitored directly) is multiplied by the emission factor (which is sourced from the relevant national study – National Inventory Report of Ukraine under the Kyoto Protocol) and any conversion coefficients.

Electricity consumption and related greenhouse gas emissions due to dismantling of waste heap to be taken into account in calculating the project emissions. Carbon dioxide emissions due to electricity consumption in the coal mine way in an amount, equivalent to the design of coal - a leakage that can be taken into account at base of the State Statistics Committee data, concerning unit costs of electricity at coal mines in Ukraine in the relevant year.

This leakage is directly attributable to the JI project activity according to the following assumption: the coal produced by the project activity from the waste heap will substitute the coal produced by underground mines of the region in the baseline scenario. This assumption is explained by the following logic: Energy coal market is demand driven as it is not feasible to produce coal without demand for it. Coal is a commodity that can be

freely transported to the source of demand and coal of identical quality can substitute some other coal easily. The project activity cannot influence demand for coal on the market and supplies coal extracted from the waste heaps. In the baseline scenario demand for coal will stay the same and will be met by the traditional source – underground mines of the region. Therefore, the coal supplied by the project in the project scenario will have to substitute the coal mined in the baseline scenario. According to this approach equivalent product supplied by the project activity (with lower associated specific green-house gas emissions) will substitute the baseline product (with higher associated specific green-house gas emissions). This methodological approach is very common and is applied in all renewable energy projects (substitution of grid electricity with renewable-source electricity), projects in cement sector (e.g. JI0144 Slag usage and switch from wet to semi-dry process at JSC "Volyn-Cement", Ukraine), projects in metallurgy sector (e.g. UA1000181 Implementation of Arc Furnace Steelmaking Plant "Electrostal" at Kurakhovo, Donetsk Region) and others.

4.9 Estimation of emission reductions or enhancements of net removals (42-47)

The PDD indicates assessment of emissions or net removals in the baseline scenario and in the project scenario as the approach chosen to estimate the emission reductions or enhancement of net removals generated by the project.

The PDD provides the ex ante estimates of:

(a) Emissions or net removals for the project scenario (within the project boundary), which are 34 615 tonnes of CO2eq for period 01/09/2008-31/12/2012 and 63 688 tonnes of CO2eq for period 01/01/2012-31/12/2020;

(b) Leakage, as applicable, which are -486 267 tonnes of CO2eq for period 01/09/2008-31/12/2012 and -929 864 tonnes of CO2eq for period 01/01/2012-31/12/2020;

(c) Emissions or net removals for the baseline scenario (within the project boundary), which are 1 0707 350 tonnes of CO2eq for period 01/09/2008-31/12/2012 and 3 290 240 tonnes of CO2eq for period 01/01/2012-31/12/2020;

(d) Emission reductions or enhancements of net removals adjusted by leakage (based on (a)-(c) above), which are 2 158 996 tonnes of CO2eq for period 01/09/2008-31/12/2012 and 4 156 416 tonnes of CO2eq for period 01/01/2012-31/12/2020.

The estimates referred to above are given:

(a) On a yearly basis;

(b) From 01/09/2008 to 31/12/2020, covering the whole crediting period;

(c) On a source-by-source/sink-by-sink basis;

(d) For each GHG gas, which are CO2

(e) In tonnes of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol;

The formula used for calculating the estimates referred above, which are described in the section 4.7 of this Determination Report, are consistent throughout the PDD.

For calculating the estimates referred to above, key factors, e.g. local prices for electricity, coal and diesel fuel, available production resources, influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above, such as work and laboratory logbooks, work and laboratory monthly and yearly reports, production sailing invoices are clearly identified, reliable and transparent.

Emission factors, such as emission factor for electricity consumption, Carbon Oxidation Factor of Coal, Carbon Oxidation Factor of Diesel Fuel, etc, were selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions or enhancements of net removals over the crediting period is calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period, and multiplying by twelve.

Identified problem areas for project monitoring plan, project participants' responses and conclusions of Bureau Veritas Certification are described in Annex A to the Determination Report (refer to CAR 11).

4.10 Environmental impacts (48)

The PDD lists and attaches documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party, such as permit on pollutant by stationary sources, which is mentioned in the PDD.

The PDD provides conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party, if the analysis referred to above indicates that the environmental impacts are considered significant by the project participants or the host Party.

The problem areas for environmental impacts of the project were not identified

4.11 Stakeholder consultation (49)

The host Party for the project is Ukraine. The project meets the applicable standards and requirements, set forth in Ukraine. The Host Party does not put forward the requirement to consult with stakeholders to JI projects.

Any comments from local authorities or stakeholders were not obtained.

4.12 Determination regarding small scale projects (50-57)

"Not applicable"

4.13 Determination regarding land use, land-use change and forestry (LULUCF) projects (58-64)

"Not applicable"

4.14 Determination regarding programmes of activities (65-73)

"Not applicable"

5 SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

No comments, pursuant to paragraph 32 of the JI Guidelines, were received.

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the "Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere" Project in Shakhtarsk town, Donetsk Region, Ukraine. The determination 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 determination consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

Project participant/s used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides barrier analysis and common practice analysis, to determine that the project activity itself is not the baseline scenario.

Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The review of the project design documentation (version 2.1) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

The determination is based on the information made available to us and the engagement conditions detailed in this report.

7 REFERENCES

Category 1 Documents:
Documents provided by SIA "Widzeme-Eko" that relate directly to the GHG components of the project.

/1/ Project Design Document "Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere." Version 1.0 dated 25/05/2012
/2/ Project Design Document "Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere." Version 2.0 dated 11/06/2012
/3/ Project Design Document "Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere." Version 2.1 dated 14/06/2012
/4/ ERUs calculation Excel-file "Calculation1.5_GL_xlsx.xlsx"
/5/ Letter of Endorsement # 1491/23/7 dated 09/06/2012 issued by State Environmental Investment Agency of Ukraine

Category 2 Documents:
Background documents related to the design and/or methodologies employed in the design or other reference documents.

/1/ "Guidance on Criteria for Baseline Setting and Monitoring", version 03.
/2/ Contract of industrial product supply # 02/01-11 from 02/01/2011. (in Russian).
/3/ Act of admission and transmission of waste heap from 18/07/2008 between PE ICC«Altair-2007» and PE ICC "Tefida".
/4/ Agreement # 18/07/08 from 18/07/2008 between PE ICC«Altair-2007» and PE ICC "Tefida".
/5/ Passport of waste heap of leased enterprise "Shakhtarska-Glyboka" mine from 14/11/2007
/6/ Passport. Scales automobile electronic tenzometric VTA-60, 04/11/2007 #091200795 (in Russian).
/7/ Agreement of subcontract # 02/01-1 from 02/01/2011 between Ltd «Niva-2012»(Performer) and PE ICC«Altair-2007» (Contractor) on the work of dismantling the dump of "Shakhtarska-Glyboka" mine
/8/ Agreement of subcontract # 02/01/11-1 from 02/01/2011 between PE "Industrial commercial company "Tefida" (Customer) and Ltd "Niva-2012" (Performer) on the work of dismantling the dump of "Shakhtarska-Glyboka" mine»
/9/ Contract of industrial product supply # 01/07-1 from 01/07/2009. (in Russian).
/10/ Agreement of subcontract # 49/07 from 01/07/2009 between PE " Industrial commercial company "Technoprominvest" (Customor) and PE ICC«Altair-2007» (Contractor) on the work of dismantling the dump of "Shakhtarska-Glyboka" mine
/11/ Agreement of subcontract # 01/07/09-1 from 01/07/2009 between PE "Industrial commercial company "Tefida" (Customer) and PE "Industrial commercial company "Technoprominvest" (Performer) on the work of dismantling the dump

of "Shakhtarska-Glyboka" mine»

/12/ Contract of industrial product supply # 18/07 from 18/07/2008. (in Russian).

/13/ Agreement of subcontract # 33/08 from 18/07/2008. between TOB "Trading Company "Antares" (Performer) and PE ICC«Altair-2007" (Contractor) on the work of dismantling the dump of "Shakhtarska-Glyboka" mine

/14/ Agreement of subcontract # 18/07/08-1 from 18/08/2008. between PE "Industrial commercial company "Tefida" (Customer) and "Trading Company "Antares" (Performer) on the work of dismantling the dump of "Shakhtarska-Glyboka" mine

/15/ Certificate of metrological certification #156 from 11/04/2008, the scales automobile electronic tenzometric VTA-60 # 070900951.

/16/ Certificate of metrological certification # 169 from 21/05/2009 the scales automobile electronic tenzometric VTA-60 # 070900951.

/17/ Certificate of metrological certification #132 from 18/04/2010 the scales automobile electronic tenzometric VTA-60 # 070900951

/18/ Certificate of metrological certification # 146 from 25/03/2011. the scales automobile electronic tenzometric VTA-60 # 070900951

/19/ Certificate of metrological certification # 153 from 05/03/2012 the scales automobile electronic tenzometric VTA-60 # 070900951

/20/ Registration certificate MB.2.844.000 ПС on Hygrometer psychrometric issued JSK «Steclopribor» (in Russian).

/21/ Order Derjspojivstandart Ukraine "Donetskstandartmetrolohiya" SC # 283 of 15/04/2011, the appointing committee to check the conditions for certification of Coal Laboratory.

/22/ Certificate attestation of Coal Chemic al Laboratory PE "Industrial - ommercial Firm" UKRHYMVUHLEKACHESTVO" # VL-089/2011 issued 4/22/2011 was in force prior to 22/04/2014.

/23/ Certificate number 361 and the protocol number 361 of 28/05/2008, the screening laboratory certification number 347 for grain size and purity sifter loose types of materials to form a square cell that belongs to JSC "Rodnik".

/24/ Certificate # 00732 and the protocol # 00732 from 15/08/2010, the certification of sieves with mesh metal square cells, type SL-200, pl. # 26047.

/25/ Certificate # 362 and the protocol # 362 from 28/05/2008, the screening laboratory certification # 348 for grain size and purity sifter loose kinds of materials with a round shape cell.

/26/ Certificate # 334 and the protocol # 334 from 01/10/2008 certification of electric laboratory SNOL 7,2/1100 pl. # 06174.

/27/ Certificate # 72 dated 05/05/2011, at Electric laboratory SNOL 67/350, pl. #11928.

/28/ Certificate # 71 dated 05/05/2011, at Electric SNOL 7,2/1100 pl. # 05793.

/29/ Certificate # 10 and protocol # 10 dated 25/01/2011, the certification # 347 sieve control type SLM, pl. # 26047 to determine the grain size and purity sifter loose types of materials to form a square cell.

/30/ Certificate # 9 and protocol # 9 dated 25/01/2011, the certification # 347 sieve control type SLM, pl. # 347 to determine the grain size and purity sifter loose types of materials to form a square cell.

/31/ Certificate # 8 and protocol # 8 dated 25/01/2011, the screening laboratory certification # 347, pl. # 348 to determine the grain size and purity sifter loose kinds of materials with a round shape cell.

/32/ Certificate # 7 dated 20/01/2011, at Electric laboratory furnace SNOL 7,2/1100 pl. # 103426

/33/ Certificate # 330 and the protocol # 330 dated 23/09/2008, the certification of the drying box SNOL 67/350, pl. # 1235

/34/ Act dated 20/04/201 on the execution of the "Donetskstandartmetrolohiya" SC , coal laboratory tests on PE "VFK "UKRHYMUHLEKACHESTVO" certification criteria.

/35/ Act # 26/70190 of the state weights laboratory calibration of general purpose and standard of all types, certified screens of all types, metrological certification muffle furnaces, electric resistance furnaces.

/36/ Guarantee tickets to the electronic scales A 6000, # 759, electronic scales XAS 100/C # 479, # 759, furnace SNOL 67/350, pl. # 12 357 , laboratory electric furnace SNOL 7.2/1100 # 06174 (in Russian).

/37/ Expert opinion dated 31/03/2011, with the results of examination of documents submitted Coal Laboratory PE "TCF" UkrKhymUhleKachestvo" which examined on measurements in the state metrological supervision.

/38/ Journal of weighing equipment and technology for coal laboratories firm "UkrHhimUgleKachestvo" (in Russian).

/39/ Passport # 9. Electric Laboratory, pl. # 05793, inv. # 9, the type - SNOL 7.2/1100 (in Russian).

/40/ Passport # 7. Electric Laboratory furnace, pl. #11928, inv. #7, the type - SNOL 67/350 (in Russian).

/41/ Passport # 6. Sieve Laboratory, pl. # 347, inv. # 6 (in Russian).

/42/ Passport # 5. Sieve Laboratory, pl # 348, inv. # 5 (in Russian).

/43/ Passport # 4. Stopwatch pl. # 7095, inv. # 4, type SOPpr 2a-2-010 (in Russian)

/44/ Passport # 3. Electronic Scales, pl. # 209 807, inv. # 3, the type of XAS 100/1 (in Russian).

/45/ Passport # 2. Electronic Scales, pl. # 214295, inv. # 2, the type of XAS 100/1 (in Russian).

/46/ Passport # 1. Scales pl. # 759, inv. # 1, type A-6000 ((in Russian).

/47/ Plan for coal laboratory firm "UkrKhimUhleKachestvo" (in Russian).

/48/ Guide of maintenance. Electric water distiller pharmacy, DE-4-02 "EMO" OKP 94 5243, model 737 (in Russian).

/49/ Certificate of verification of the working measuring instrument from 15/03/2012 # 02/08-245 - mechanical stopwatch JOP pr-2a-2-000 pl. # 7095

/50/ Passport. Mechanical Stopwatch SOppr-2a-2-010 (in Russian).

/51/ Quality Certificate # 005 dated 25/04/2008, the chopper vibrating 75T - DRM, pl. # 1087 (in Russian)

/52/ Passport-75T DrM.000PS. Chopper vibrating 75T-DRM (in Russian).

/53/ Terms of Reference. Automobile balance electronic Strain BTA -60, 2008 (in Russian).

/54/ Working drawings RP-07. Scales automobile electronic tenzometric series BTA-60, certificated on 03/04/2008, the weights (in Russian).

/55/ License series AB, # 513073 from 22/12/2009 of the Ministry of Regional Development and Construction of Ukraine on economic activity associated with the creation of objects of architecture issued by the joint venture as a limited liability company "UKRESTMARKINVEST."

/56/ Permit on continious of high hazard performance #0088.08.14-29.24.1 joint venture in the form of "Ukrestmarkinvest" LCC" from 06/02/2008

/57/ Impact Assessment (EIA)) #17/13-4

Persons interviewed:

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

/1/ Ivanenko Gennadiy Volodymyrovych - 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/ Berestova Irina Ivanivna - PE "ICC Ukrhimuglekachestvo" Head of Laboratory
/5/ Fedko Olexandr Anatoliyovych - PE ICC "Tefida" Production Manager
/6/ Kushnirenko Mykolay Ivanovych - PE ICC "Tefida" Storekeeper-recorder (storage site of unsorted fraction)

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APPENDIX A: DETERMINATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

DETERMINATION PROTOCOL

Check list for determination, according JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
General description of the project				
Title of the project				
-	Is the title of the project presented?	Waste heap dismantling by PE ICC "Tefida" with the aim of decreasing greenhouse gases emissions into the atmosphere	OK	OK
-	Is the sectoral scope to which the project pertains presented?	Sectoral scope: 8 - Mining/mineral production	OK	OK
-	Is the current version number of the document presented?	The version number of the PDD is 1.0 dated 25/05/2012	OK	OK
-	Is the date when the document was completed presented?	The date when the PDD version 1.0 was completed is 25/05/2012	OK	OK
Description of the project				
-	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and	The project is designed to extract coal from the mine dumps ""Shakhtarska-Glyboka" " far from the Shakhtarsk town, Shakhtarsk district, Donetsk region, Ukraine. Emission reductions due to the implementation of this project will come from three major sources:	CL01	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	c) Project scenario (expected outcome, including a technical description)?	- Removing the source of green-house gas emissions from the combustion of waste heaps by the extraction of coal fraction from the waste-heaps; Reducing fugitive emissions of methane due to the replacement of coal that would have been mined, by the project; - Reducing electricity consumption for coal production from the mines by replacing its waste heaps coal. The purpose of this project is extraction of coal component from waste heap, for further blending with steam coal to the normative parameters and burning with aim of heat and electricity production. *CL 01* Explain how many waste heaps are dismantling by the project**.**		
-	Is the history of the project (incl. its JI component) briefly summarized?	Yes, the history of the project including its JI component is summarized in section A.2. of the PDD. *CL 02* Explain by what contract or contract paragraph the restoration of fertile layer and the natural biological community renewal is prescribed.	CL02	OK
Project participants				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Are project participants and Party(ies) involved in the project listed?	Section A.3 Table 1 of the PDD names two project participants: - PE ICC "Tefida", and - SIA "Vidzeme Eko"	OK	OK
-	Is the data of the project participants presented in tabular format?	The data of the project participants are provided in the tabular format	OK	OK
-	Is contact information provided in Annex 1 of the PDD?	The contact information of project participants is provided in Annex 1 of the PDD.	OK	OK
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Parties involved don't wish to be considered project participants.	OK	OK
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine	OK	OK
-	Region/State/Province etc.	Donetsk Region	OK	OK
-	City/Town/Community etc.	Shakhtarsk town	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	*CAR 01* Please provide information on the location of the sorting complex and indicate it on the map in Section A.4.	CAR01	OK
Technologies to be employed, or measures, operations or actions to be implemented by the project				
-	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical	The project includes the implementation of the following steps and activities that will allow utilize waste heap: installation of the sorting complex, transports and auxiliaries. Detailed description of	CAR02 CAR03 CAR04 CL03	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	data and the implementation schedule described?	technology and measures used in this project are described in the PDD, version 2.1. Please see section A.4.2 of the PDD. *CAR 02* Please give in section A.4.2 specifications of the main electrical equipment. *CAR 03* Please, add a schedule of implementation and putting into operation of the installed equipment. *CAR 04* Provide a correct reference to specifications of vibrating inertial sifter GIL-52A (reference number 6), and provide the basic characteristics of the equipment in Section A.4.3. in a tabular form. *CL 03* Provide explanations whether the dump was formed from by-products of mining concentrating plant. *CL 04.* Provide endorsement that the project equipment will operate to the end.	CL04	
Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
-	Is it stated how anthropogenic GHG	Waste heaps are frequently spontaneously igniting	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	emission reductions are to be achieved? (This section should not exceed one page)	and burning, causing emissions green-house gases and other pollutants. The proposed project aims to extract coal from waste heap created during underground coal mines activities and burning of the entire volume of coal for electricity or heat production. It also will partially help to avoid methane emissions from coal mines, because the coal from waste heap will replace the coal of mines. More detailed information is in Section A.4.3, which explains why the reduction would not occur in the absence of the proposed project. The amount of information does not exceed one page.		
-	Is it provided the estimation of emission reductions over the crediting period?	Yes. Section A.4.3.1. of the PDD provides the tables indicating estimated annual reduction for the chosen credit period in tCO2e. Annual average of estimated emission reductions over the crediting period from 01/09/2008 – 31/12/2012 is 498 230 tones of CO2 equivalent and for the period from 01/01/2013 – 31/12/2020 is 519 552 tones of CO2 equivalent. *CL 05* Explain why there was a great period for waste heap dismantling (till 2020). According to the site-visit most part of the dump is dismantled.	CL05	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Is it provided the estimated annual reduction for the chosen credit period in tCO2e?	The estimations of emission reduction is provided in tCO2e	OK	OK
-	Are the data from questions above presented in tabular format?	The data from questions above is presented in the tabular format	OK	OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	The length of the crediting period is indicated	OK	OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	The estimations of emission reduction is provided in tCO2e	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	The project obtained Letter of Endorsement #1491/23/7 dated 09/06/2012 from State Environmental Investment Agency of Ukraine As indicated in Section A.5 of the PDD, the project hasn't received a Letter of Approval from NEIA of Ukraine. Project approval by the Host Country where the project is implemented and Investor Country are obtained after the end of Determination process. *FAR01* Please refer to Table 2, section A. The Ukrainian project participant will be authorized	FAR01	

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		by the Host Party through the issuance of the approval for the project		
19	Does the PDD identify at least the host Party as a "Party involved"?	Ukraine (Host Party) isn't indicated as the Party Involved	OK	OK
19	Has the DFP of the host Party issued a written project approval?	See section 19 of this protocol	OK	OK
20	Are all the written project approvals by Parties involved unconditional?	The Letter of Endorsement #1491/23/7 dated 09/06/2012 issued By State Environment Investment Agency is unconditional	OK	OK
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: − A written project approval by a Party involved, explicitly indicating the name of the legal entity? or − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	See section 19 of this protocol and section 4.2 of the Determination Report	OK	OK
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline?	The PDD explicitly states that JI specific approach was chosen for baseline identification	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− JI specific approach − Approved CDM methodology approach			
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	The baseline for this JI project was established in accordance with Appendix B, Guidelines for Implementation and paragraphs 23 - 29 " Guidance on Criteria For Baseline Setting And Monitoring" Version 03. To establish a baseline, project participants have chosen the methodology applied in the project "Waste heap dismantling with the aim of decreasing greenhouse gases emissions into the atmosphere" special approach which JI was determined and has already passed the stage of verification. Its use is described in full and transparent manner.	OK	OK
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance?	In the PDD there is ground that the baseline was established by calculation and description of possible future scenarios based on conservative assumptions and choosing the most likely scenario. Plausible future scenarios are listed and described on the basis of conservative assumptions and selecting the most plausible one in the context of this project.	CAR05 CAR06 CL06 CL07 CL08	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (d) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure? (f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?	All scenarios, except - continuation of existing situation, face prohibitive barriers. Therefore, continuation of existing situation is the most plausible future scenario and is the baseline scenario. Analysis of the barriers is given in section B.1. of PDD. *CAR 05* In Table 4 correct the 2011 year for Acoal that used twice. *CAR 06* Provide clarification in the description: the average ash content of what coal is taken for calculation. *CL 06* Specify the statement that the project is one of the first of its kind. *CL 07* Please specify where the used principle of conservativeness is described on p. 15: b). Lower range of parameters is used for calculation of baseline emissions and higher range of parameters is used for calculation of project activity emissions. *CL 08* Please explain where energy coal moisture is taken from for greenhouse gas emissions calculating in the baseline scenario.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
24	If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	Project participants have applied the JI specific approach to identify the baseline	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	Yes. The explanation and references of carbon emission factor is indicated in Section B of the PDD.	OK	OK
Approved CDM methodology approach only_Paragraphs 26(a) – 26(d)_Not applicable				
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of	To demonstrate additionality, project participants have used the approach in accordance with paragraph 44 (b) Annex 1 "Guidelines for JISC on the criteria for baseline setting and monitoring" version 03, which is to provide transparent information that can track and has already received a positive determination by an accredited independent entity. This approach is fully described in Section B.2. PDD.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".			
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	The approach (b) was implemented in accordance with Paragraph 44 of the Annex 1 "Guidelines on criteria for baseline setting and monitoring" version 03. Providing a transparent and confirmed information indicates that the AIE has previously positively determined as additional similar projects implemented under similar conditions	OK	OK
29 (b)	Are additionality proofs provided?	Detailed analysis provided in sections A.4.3., B.1. and B.2. of the PDD demonstrates that emissions in the project scenario would be less from emissions in the baseline scenario because of	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		activity implementation by the project. The same approach was chosen in comparable project.		
29 (c)	Is the additionality demonstrated appropriately as a result?	Yes, in sections A.2., B.1. and B.2. of PDD it is clearly demonstrated that the activities under this project is not likely baseline scenario. The information indicates that the baseline scenario is a continuation of the current situation.	OK	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	All explanations, descriptions and analyses made in accordance with "Guidelines on criteria for baseline setting and monitoring" version 03	OK	OK
Approved CDM methodology approach only_ Paragraphs 31(a) – 31(e)_Not applicable				
Project boundary (applicable except for JI LULUCF projects				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	Sources of GHG emissions that is under the control of project participants are clearly defined in the PDD. The boundaries of the project include dumps of mine 'Shakhtarsk-Glyboka" dismantling in the project and equipment installed within the project activity boundary (sorting complex). Emission that is outside of the project and related to the project is referred to the leakages. Table 16 in Section B.3. "Sources of emissions in the baseline and project scenario" summarizes the emissions that are considered as significant.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Please see section B.3. of the PDD.		
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	Project boundaries are determined based on assessment of each separate case in accordance with criteria defined in Paragraph 32(a) above.	OK	OK
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	Project boundaries and emission sources of relevant gases are indicated in section B.3. of the PDD (Figure 7 and 8).	OK	OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	Generally, PDD provides a clear description of project activity and baseline scenario - coal is extracted from dismantling of carbonaceous mass of the waste heap that will replace the share of coal extracted from the mine for energy. At the same time these steps eliminate emissions to the atmosphere from the ignition and burning dumps. All gases and sources within the project are listed in Table 16, and are presented in Section B.3. PDD.	OK	OK
Approved CDM methodology approach only_Paragraph 33_ Not applicable				
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real	The project's starting date is clearly defined in section C.1. of the PDD - 25/07/2008. This date is the date when installation of project equipment	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	action of the project will begin or began?	was begun		
34 (a)	Is the starting date after the beginning of 2000?	Yes. The starting date is after the beginning of 2000.	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	The PDD states the expected operational lifetime of equipment in 12 years and 4 months (148 months)	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	The PDD states the length of crediting period in 4 years and 4 months (52 months)	OK	OK
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	The starting date of the crediting period is the date when the first emission reductions were generated by the project	OK	OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	The PDD states that the crediting period starts 01/09/2008 after the 2008 beginning	OK	OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission	Yes, it is indicated in section C.3. of the PDD that the extension of the crediting period is with the consent of host Party. Estimates of emission reductions for the period before 2012 and after 2012 are presented	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	separately in section A.4.3.1. of the PDD.		
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	The PDD explicitly indicates that JI specific approach was chosen for monitoring plan establishing *CAR 07* Please provide clarification what "option(a)" was taken from " Guidelines for users of the joint implementation project design document from" Version 04.	CAR07	OK
JI specific approach only				
36 (a)	Does the monitoring plan describe: − All relevant factors and key characteristics that will be monitored? − The period in which they will be monitored? − All decisive factors for the control and reporting of project performance?	Detailed theoretical description, in complete and transparent manner, and the justification of the chosen monitoring plan with step-wise approach was provided by project participants in Section D.1 of PDD.	OK	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net	The monitoring plan provides list of variables constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	removals to be monitored?			
36 (b)	If default values are used: − Are accuracy and reasonableness carefully balanced in their selection? − Do the default values originate from recognized sources? − Are the default values supported by statistical analyses providing reasonable confidence levels? − Are the default values presented in a transparent manner?	The list of default values was provided in the section D.1 of the PDD	OK	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	Assumptions, formulas, parameters, data sources and key factors are described in Section D of the PDD. *CAR 08* Please exclude from the list of basic greenhouse gas emissions formed from coal burning for energy production. *CL 09* Explain whether taken into account the increasing of electric power use by equipment due to obsoletion and wear.	CAR08 CL09	OK
36 (b) (ii)	For other values, − Does the monitoring plan clearly indicate the precise references from	The monitoring plan, accurately and clearly differs data and parameters that must be monitored during the crediting period. Data to be collected for	CAR09 CL10	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	which these values are taken? − Is the conservativeness of the values provided justified?	monitoring of project emissions, project participants described in Section D.1.1.1. PDD. *CAR 09* Please detail the process of the coal quality monitoring. *CL 10* Explain how coal from other sources is excluded from monitoring.		
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	The procedures to be followed if expected data are unavailable are described in the section D of the PDD	OK	OK
36 (b) (iv)	Are International System Unit (SI units) used?	The International System Unit is used	OK	OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	There are no any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	All data required are in consistency between the baseline and monitoring plan	OK	OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for	The monitoring plan was draw in accordance within appendix B of "Guidance on criteria for baseline setting and monitoring"	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	baseline setting and monitoring"?			
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	In monitoring plan clearly and accurately separates data and parameters pre-installed and available already at the stage of determination. Some data and parameters that were taken lower at the stage of determination of the conservative reasoning may be specified at the time of verification for more accurate calculation of emission reductions.	OK	OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	The monitoring plan indicates methods employed for data monitoring (including its frequency) and recording	OK	OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline	The formulae used for estimation of emissions with correct formats where it is needed, are clearly and consistently indicated	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?			
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	The underlying rationale of the formulae is explained	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	These formulae are clearly and consistently indicated in the Section D of PDD.	OK	OK
36 (f) (iii)	Are all equations numbered?	Yes, all equations are numbered	OK	OK
36 (f) (iv)	Are all variables, with units indicated defined?	All variables with units are indicated	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	The conservativeness of the algorithms and procedures are justified	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	It's not possible to include methods to quantitatively account for uncertainty in key parameters of monitoring. Also, see section D of the PDD	OK	OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	The consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline was justified	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	Parts of the algorithms or formulae that are not self-evident are explained	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	The justification of consistency between monitoring procedures and standard technical procedures in the mining sector was provided in the section D of the PDD	OK	OK
36 (f) (vii)	Are references provided as necessary?	All necessary references provided in the PDD are in work	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All implicit and explicit key assumptions are explained in a transparent manner	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	In Section D of the PDD describes how uncertainty taking into account and how was provided conservative.	OK	OK
36 (f) (vii)	Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?	In Section D of the PDD describes how uncertainty taking into account and how was provided conservative.	OK	OK
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of	Yes, in the project values from IPCC Report and National Inventory Report of Ukraine 1990-2010 are used, all the references to national and international standards for monitoring are listed in	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	Section D of the PDD.		
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	The statistical techniques doesn't use in the monitoring plan	OK	OK
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	Quality control and quality assurance procedures undertaken for data monitored are indicated in tabular format in section D.2 of the PDD. *CAR 10* In monitoring plan accounting data are used for some parameters and in the structure of plan preparation accountancy is absent. Add to scheme accounting department and explain the procedures of quality control (QC) and quality assurance (QA) are present in this subsection.	CAR10	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	In Section D.3. PDD clearly represented commitment and organizational arrangements for data collection and storage. General control of the monitoring system is carried out by company management Private Firm "Tefida" within the existing system of monitoring and reporting.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Subdivisions that are responsible for primary data collection are clearly identified and fully ensure the quality of monitoring data.		
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Monitoring plan, on the whole, reflects good monitoring practices appropriate to the project type. All necessary parameters and data easily and accurately track and identify possible shortcomings or failure of the monitoring process to quickly resolve the issue.	OK	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	The monitoring plan provides the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources in tabular form	OK	OK
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	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.	OK	OK
37	If selected elements or combinations of approved CDM methodologies or	In this project any of CDM methodology is applied. To establish a monitoring plan uses a JI specific	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	approach.		
Approved CDM methodology approach only_Paragraphs 38(a) – 38(d)_Not applicable				
Applicable to both JI specific approach and approved CDM methodology approach_Paragraph 39_Not applicable				
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	The PDD describes assessment of leakages in appropriately way with explanations of which source of leakage are to be calculated or neglected	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	The procedures for leakages calculations are provided in the section D of the PDD	OK	OK
Approved CDM methodology approach only_Paragraph 41_Not applicable				
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario	The PDD indicates that assessment of emissions or net removals in the baseline scenario and in the project scenario was chosen	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(b) Direct assessment of emission reductions			
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	The PDD provides estimates of: (a) Emissions or net removals for the project scenario (within the project boundary), which are 34 615 tonnes of CO2eq for period 01/09/2008-31/12/2012 and 63 688 tonnes of CO2eq for period 01/01/2012-31/12/2020; (b) Leakage, which are -486 267 tonnes of CO2eq for period 01/09/2008-31/12/2012 and -929 864 tonnes of CO2eq for period 01/01/2012-31/12/2020; (c) Emissions or net removals for the baseline scenario (within the project boundary), which are 1 0707 350 tonnes of CO2eq for period 01/09/2008-31/12/2012 and 3 290 240 tonnes of CO2eq for period 01/01/2012-31/12/2020; (d) Emission reductions or enhancements of net removals adjusted by leakage (based on (a)-(c) above), which are 2 158 996 tonnes of CO2eq for period 01/09/2008-31/12/2012 and 4 156 416 tonnes of CO2eq for period 01/01/2012-31/12/2020	OK	OK
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante	See section 42 of this protocol	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	estimates of: (a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?			
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or	The estimates are given: - on yearly basis - from the 01/09/2008 to 31/12/2020 - On a source-by-source/sink-by-sink basis - For CO2 - In tonnes of CO2 equivalent The formula used for calculating the estimates in 43 are consistent throughout the PDD Key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project were taken into account The data sources used for calculating the estimates in 43 are clearly identified, reliable and transparent. Emission factors (including default emission	CAR11	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent? (e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions	factors) used for calculating the estimates in 43 are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. The estimations in 43 are based on conservative assumptions and the most plausible scenarios in a transparent manner. The estimates in 43 or 44 consistent throughout the PDD. The annual average of estimated emission reductions or enhancements of net removals are calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve *CAR 11* Add to the Tables 27 and 28 values of average annual emission reductions during the same period.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	The PDD provides ex ante emissions calculation for 2012-2020 years	OK	OK
Approved CDM methodology approach only_Paragraphs 47(a) – 47(b)_Not applicable				
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	In Section F of the PDD, project participants have provided description of the possible environment impacts. According to this analysis, the negative environment impact in the project scenario is much lower than in the baseline scenario. To determine the completeness of the analysis requires some explanation.	OK	OK
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental	The Host Party for this project is Ukraine. Environmental Impact Assessment (EIA) is the part of the Ukrainian project planning and permitting procedures. Implementation regulations for EIA are included in the Ukrainian State Construction Standard DBN A.2.2.-1-2003. Transboundary impacts are not observed. There	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	impact assessment undertaken in accordance with the procedures as required by the host Party?	are no impacts that manifest within the area of any other country and that are caused by a proposed project activity.		
Stakeholder consultation				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	Any comments from local stakeholders were obtained.	OK	OK
Determination regarding small-scale projects (additional elements for assessment)_Paragraphs 50 - 57_Not applicable				
Determination regarding land use, land-use change and forestry projects _Paragraphs 58 – 64(d)_Not applicable				
Determination regarding programmes of activities_Paragraphs 66 – 73_Not applicable				

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
CAR 01 Please provide information on the location of the sorting complex and indicate it on the map in Section A.4.	-	Sorting complex is located at the territory of mine "Shahktarska-Glyboka" in the vicinity of waste heap that is dismantling.	The issue is closed
CAR 02 Please give in section A.4.2 specifications of the main electrical equipment.	-	In Section A.4.2 direct references to sites with equipment specifications are provided, also a table with the characteristics of the most powerful device – vibrating inertial sifter GIL-52A is given.	The issue is closed
CAR 03 Please, add a schedule of implementation and putting into operation of the installed equipment.	-	Section A.4.2. was supplemented with a schedule of implementation and commissioning of the main industrial equipment: putting into operation of sorting complex in August 25, 2008 Commencement of the complex operation is in September 1,2008 Date of availability credit period is in September 1,2008	The issue is closed

CAR 04 Provide a correct reference to specifications of vibrating inertial sifter GIL-52A (reference number 6), and provide the basic characteristics of the equipment in Section A.4.3. in a tabular form.	-	Reference is made correctly «Vibrating inertial sifter GVI-8x2-M (GIL-52A)» *http://www.zaoplatov.ru/equipment/miner?n=213* The main characteristics are given in the tabular form.	The issue is closed
CAR 05 In Table 4 correct the 2011 year for Acoal that used twice.	23	2011 year is corrected on 2012. Please see section B.1 of examining PDD, Version 2.1	The issue is closed
CAR 06 Provide clarification in the description: the average ash content of what coal is taken for calculation.	23	Clarification is given - the average ash content of steam coal extracted in Donetsk region of Ukraine in the corresponding year.	The issue is closed
CAR 07 Please provide clarification what "option (a)" was taken from " Guidelines for users of the joint implementation project design document from" Version 04.	36	Option (a) of the monitoring plan, which applies a special approach to JI projects, including inclusion in the description all assumptions, formulae, parameters, data sources and key factors, and substantiate what assumptions are taken into account and the principle of conservativeness is carried out.	The issue is closed

CAR 08 Please exclude from the list of basic greenhouse gas emissions formed from coal burning for energy production**.**	36 (b) (i)	Greenhouse gas emissions in the baseline scenario are primarily generated by burning coal for energy purposes. The fact that these emission equals to levels in the project scenario emissions from coal combustion during waste heap dismantling, is not a reason to exclude them from the list of emissions (though it does not exist in nature). In the PDD states that these emissions are excluded to simplify the calculation.	The issue is closed

CAR 09 Please detail the process of the coal quality monitoring.	36 (b) (ii)	For sampling for further analysis of ash and moisture the following procedure is implemented: Selected samples are brought and treated by Division Technical Control (DTC). Sample is treated at upgraded MSL (machine sample treating laboratory). It is crushed to the size of 0-3 mm. Then it is conned and reduced by divisor (this process is carried out three times) until the time as the sample weight will be 2.3 kg. Then the sample pressed to a disk until the thickness of 2 cm and cover tightly with the bars to divide into squares. Then in a checkerboard pattern sampling is collected of weight no less than 500 grams. Then two companion certificate is written, which shall include: - Number of certificate; - Date; - Mark, class; - Supplier; - Name of the needed analysis.	The issue is closed

		One certificate is placed in the pot with the sample. The other one is attached to the pot using special threads or wires. The pot is closed in such way that the lock of the cover and pot is combined. Then it is tied up by rope into two bundles and sealed, so that it has not silted. Usually two pots are filled: - One to the lab for testing; - Second to the arbitration for storage for two months. Ash and moisture fraction (0-30mm) is measured on a regular basis with registration of decadal reports.	
CAR 10 In monitoring plan accounting data are used for some parameters and in the structure of plan preparation accountancy is absent. Add to scheme accounting department and explain the procedures of quality control (QC) and quality assurance (QA) are present in this subsection.	36 (i)	To the scheme accounting department is added. In the PDD there is a description of quality control and quality assurance in this section.	The issue is closed
CAR 11 Add to the Tables 27 and 28 values of average annual emission reductions during the same period.	45	It was added – Average annual emissions reductions during the crediting period. 498 230 tCO2, Average annual emissions reductions after ending of the crediting period – 519552 tCO2	The issue is closed

CL 01 Explain how many waste heaps are dismantling by the project**.**	-	Due to the project only one dump of mine "Shakhtarsk –Glyboka" is dismantling	The issue is closed
CL 02 Explain by what contract or contract paragraph the restoration of fertile layer and the natural biological community renewal is prescribed.	-	Restoration of fertile layer and restoring the natural biocenosis is prescribed in the Contract # 18/07/08 dated July 18, 2008 – about providing services of waste heaps reclamation	The issue is closed
CL 03 Provide explanations whether the dump was formed from by-products of mining concentrating plant.	-	This waste heap was formed from direct work on the coal mine "Shakhtarsk–Glyboka." Mining concentrating plant worked on enrichment only ordinary coal that came from the mine to bring the quality of coal required for energy performance. Waste that came from the mine dumps exported to the waste heap to fixed it. This factory was closed in 1996 and equipment was partly dismantled.	The issue is closed
CL 04. Provide endorsement that the project equipment will operate to the end.	-	The probability of failure of project equipment exists, but this fact does not affect the fundamental principles of the project.	The issue is closed

CL 05 Explain why there was a great period for waste heap dismantling (till 2020). According to the site-visit most part of the dump is dismantled.	-	Waste heap considered in the project is currently disassembled in 1/3. Much of it is covered with soil to prevent ignition	The issue is closed
CL 06 Specify the statement that the project is one of the first of its kind.	23	This is the second project, which introduced the technology of coal mixing without using of enrichment. Generally in PDD emphasized that the project is one of the few of its kind.	The issue is closed
CL 07 Please specify where the used principle of conservativeness is described on p. 15: b). Lower range of parameters is used for calculation of baseline emissions and higher range of parameters is used for calculation of project activity emissions.	23	For the calculation in 2011 -2012, if no specific data, conservative values are taken such as the low value of moisture coal that is mined in the Donetsk region - 6.60%, the lowest value of the average ash content of coal that is mined in the Donetsk region – 38,7%, the lowest value of the specific energy consumption per tonne of coal produced - 84.2 kWh.	The issue is closed
CL 08 Please explain where energy coal moisture is taken from for greenhouse gas emissions calculating in the baseline scenario.	23	Moisture of steam coal taken from reference book of quality parameters of coal production and enrichment products in 2008-2010 of Ministry of Coal Industry of Ukraine, Derzhspozhivstandard of Ukraine	The issue is closed

CL 09 Explain whether taken into account the increasing of electric power use by equipment due to obsoletion and wear during theoretical calculation of consumed power energy.	36 (b) (i)	Calculation of GHG emissions due to the use of electrical equipment is based on real power consumption	The issue is closed
CL 10. Explain how coal from other sources is excluded from monitoring.	36 (b) (ii)	At the sorting equipment, whish is used, the works is carried out just for this event, the area of industrial site allows store received faction avoiding unplanned mixing with other products, other work in this area is not made, and the weight department keeps records on a computer in a separate file sheet.	The issue is closed

FAR01 Please refer to Table 2, section A. The Ukrainian project participant will be authorized by the Host Party through the issuance of the approval for the project	19	The project has been officially presented for endorsement to the State Environmental Investment Agency of Ukraine on 25th of May 2012. Letter of Endorsement # 1491/23/7 has been received. To obtain written approval of the project (letter of approval), Final Determination Report should be submitted to the State Agency of Environmental Protection of Ukraine. Then AIE prepares Determination report, PDD and Determination report will be submitted to the State Environmental Investment Agency of Ukraine for the receiving letter of approval from Ukraine. Written approval of the project from a party involved, JI project participant, in exception of the host country (Latvia) will be received no later than the first verification.	pending