DETERMINATION REPORT
CEP CARBON EMISSIONS PARTNERS S.A.

DETERMINATION OF THE
REDUCTION OF GREENHOUSE GASES BY DEMOLITION OF WASTE HEAPS OF LTD. "PROMINVEST-EKOLOHIIA"

REPORT NO. UKRAINE-DET /0833/2012

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BUREAU VERITAS CERTIFICATION

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DETERMINATION REPORT

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Client: CEP Carbon Emissions Partners S.A.	Client ref.: Fabian Knodel

Summary:

Bureau Veritas Certification has made the determination of the "Reduction of greenhouse gases by demolition of waste heaps of Ltd. "PROMINVEST-EKOLOHIIA" project of CEP CARBON EMISSIONS PARTNERS S.A., located in Luhansk 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 study of project's baseline, monitoring plan and other relevant documents. It 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 verification process is a list of Clarification, Corrective Actions Requests, Forward Actions Requests (CR, CAR and FAR), 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 methodologies of baseline setting and monitoring based on the "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 /0833/2012	JI

Project title:

Reduction of greenhouse gases by demolition of waste heaps of Ltd. "PROMINVEST-EKOLOHIIA"

Work carried out by:

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1 INTRODUCTION

CEP Carbon Emissions Partners S.A. has commissioned Bureau Veritas Certification to determine its JI project “Reduction of greenhouse gases by demolition of waste heaps of Ltd. “PROMINVEST-EKOLOHIIA” (hereafter called “the project”) at Krasne village, Luhansk 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 and obligatory to provide assurance to stakeholders of the quality of the project and its intended generation of emissions reductions 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, the monitoring plan and other relevant documents. The information in these documents meets the Kyoto Protocol requirements, UNFCCC rules and associated interpretation.

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

1.3 Determination team

The determination team consists of the following personnel:

Viacheslav Yeriomin
Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Vasyl Kobzar
Bureau Veritas Certification Team Member, Technical Expert

This determination report was reviewed by:
Ivan Sokolov
Bureau Veritas Certification Internal Technical Reviewer

Viktoria Lehka
Bureau Veritas Certification Technical Expert

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 verification and the results from determining the identified criteria.
The determination protocol serves the following purposes:

- It organizes, describes 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 determination protocol consists of two tables and is enclosed in Appendix A to this report.

2.1 Review of Documents

The Project Design Document (PDD) was submitted by CEP CARBON EMISSIONS PARTNERS S.A. together with such additional documents related to the project design and baseline as: host country Law, Guidelines for users of the joint implementation project design document form and Guidance on criteria for baseline setting and monitoring, the Kyoto Protocol, Clarifications on Determination Requirements to be checked by an Accredited Independent Entity.

To address Bureau Veritas Certification corrective action, forward action and clarification requests, CEP Carbon Emissions Partners S.A. revised the PDD version 01 of 03/09/2012 and resubmitted it on 04/12/2012 as version 02.

The determination findings presented in this report relate to the project as described in the PDD versions 01 and 02.

2.2 Follow-up Interviews

On 04/12/2012 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 CEP Carbon Emissions Partners S.A. and Ltd. "Prominvest-Ekolohiia" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table1 Interview topics

Interviewed organization	Interview topics
Ltd. "Prominvest-Ekolohiia"	➢ Implementation schedule ➢ Organizational structure ➢ Responsibilities and obligations ➢ Responsibilities and obligations on data collection and processing ➢ Installation of equipment ➢ Storage, archiving and data reporting system ➢ Actual data and records on reconstruction and operation of new equipment ➢ Control of metering equipment ➢ System of measurements record-keeping ➢ Informational technology control ➢ Personnel training ➢ Quality control procedures and technologies ➢ Internal audit and control activities
CEP CARBON EMISSIONS PARTNERS S.A.	➢ Baseline setting methodology ➢ Methodologies applied ➢ Monitoring plan ➢ PDD compliance with JI requirements

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.

Corrective Action Request (CAR) is issued, where:

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;

(b) The JI requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

The determination team may also issue Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable JI requirements have been met.

The determination team may also issue Forward Action Request (FAR), informing the project participants of an issue that needs to be reviewed during the verification.

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

To guarantee the transparency of the determination process, the concerns raised are documented in more detail in the determination protocol (Annex A to the Determination report).

3 PROJECT DESCRIPTION

The proposed project is aimed at GHG emission reduction by complete demolition of the waste heaps of mines #20, #42, #3-14, #22 and Engels Mine of Ltd. “Prominvest-Ekolohiia”, which are owned by the company located in Krasne village of Luhansk region. The project activity will prevent greenhouse gases emissions to the atmosphere.

Situation that existed prior to the Project

By-product of continuous operation of coal mines is creation of cone-shaped heaps of coal waste - spoil tips. Smoldering and burning waste heaps are the fundamental factor in violation of environmental and economic balance of Donbas mining area, which causes a complicated ecological situation, affecting the atmosphere, soil, water facilities, leading to degradation of natural landscapes and detrimental to people’s health and lives. Beneficiation at mines was inefficient and it was considered economically unreasonable to extract 100% of coal from the rock raised. As a result, waste heaps in Donbas, especially those formed in 60s-70s, contain a great amount of coal. Rock in waste heaps

examined has an ash content of 57-99%, accounting for an average of 88.5%. Moisture content varies from 0.2% to 11.7%, making an average of 3.4%. However, coal content even within one waste heap undergoes significant fluctuations and is poorly predictable.

Thus, waste heaps play an extremely negative part in the regional environment, which is multiplied at their burning. However, an outbreak and its very possibility are difficult to forecast; we can only estimate the probability of ignition, which is very high as per statistical data. Most waste heaps are very likely to ignite sooner or later. The process of carbon combustion in waste heaps is long enough and takes 5-7 years.

Limited Liability Company “PROMINVEST-EKOLOHIIA" (hereinafter - Ltd. “Prominvest-Ekolohiia”) has rich experience in excavation and mining operations, as well as in land recultivation. Ltd. “Prominvest-Ekolohiia” operates waste heaps #20, #42, #3-14, #22 and Engels Mine on lawful basis.

In the Donetsk Basin there is one of the world’s largest coal deposits (Ukraine ranks first in Europe and eighth in the world by geological reserves of fossil coal). Coal in Donbas is produced mostly by underground mining and has a history of 300 years. The basin has the total area of about 60 000 sq. km and covers the territory of Dnipropetrovsk, Donetsk and Luhansk regions. Coal reserves up to a depth of 1800 m are about 140.8 billion tonnes.

Coal beds occur at medium (400 - 800 m) and large (over 1000 m) depths and in most cases have small thickness (about 0.6-1.2 m). Coal layers are alternating with rock (shale, sandstone, limestone). Coal mining is accompanied, therefore, by escalation of large amounts of rock. Rock that is stocked in waste heaps is formed by shaft sinking (52%) and repair (48%). This "empty" rock is stocked near mine shafts in the form of spoil tips up to 60-80 m high and vertebral dumps (amounting to 92%), less frequently - flat dumps (8%). Waste heaps of Donbas cover an area of over 7 000 hectares. Most of coal is produced by large coal-mining unions of various proprietory forms. Alongside, there are small private companies engaged in coal extraction and processing (sorting, beneficiation) and fuel trade.

Baseline scenario

The baseline scenario assumes that the common practice will continue - there is a certain probability that a waste heap will spontaneously ignite and the process of its burning will continue until all coal burns down. The process of burning is accompanied by the release of carbon dioxide into the atmosphere.

Project scenario

The proposed project provides for complete demolition of the waste heaps of mines #20, #42, #3-14, #22 and Engels Mine. The demolition of waste heaps includes demolition of rock by special machinery, loading onto trucks and further transportation. This product is further sent to boiler houses to be combusted as fuel. Thus, rock in waste heaps will be fully utilized, and coal received will substitute coal, which would be produced by underground mining. As the result of the project, the possibility of self-ignition of waste heaps will be eliminated. This part of the project is unprofitable, so the joint implementation mechanism was one of critical factors of the project from the very beginning, and financial benefits as part of this mechanism were considered one of the reasons why the project was implemented.

Historical details of the project

10/01/2008 - The Management Board of Ltd. “Prominvest-Ekolohiia” made a decision to create a Joint Implementation project.
13/11/2012 - Preparation and submission of the project idea note to support anthropogenic GHG emission reductions, to the State Environmental Investment Agency of Ukraine.
03/12/2012 - Obtaining of a Letter of Endorsement No.3711/23/7 from the State Environmental Investment Agency of Ukraine

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 32 Corrective Action Requests and 9 Clarification Requests.

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

4.1 Project approval by Parties involved (19-20)

The project "Reduction of greenhouse gases by demolition of waste heaps of Ltd. "PROMINVEST-EKOLOHIIA" has already obtained endorsement from the government of Ukraine, namely a Letter of Endorsement No. 3711/23/7 issued by the State Environmental Investment Agency of Ukraine dated 03/12/2012.

Bureau Veritas Certification received this letter from the project participants and does not doubt its authenticity.
Upon completion of the Determination Report the project design document will be submitted to the State Environmental Investment Agency of Ukraine for receiving a Letter of Approval.

As the project has no approval by the Host Party, CAR 15 remains pending and will be closed after report finalizing (see Appendix A).
The identified areas of concern as to the project approval, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 15).

4.2 Authorization of project participants by Parties involved (21)

The participation for each of the legal entities listed as project participants in the PDD will be authorized by the Parties involved, through the written Letters of Approval (from the government of Estonia as the country-participant, and from Ukraine as the host party). Ref. to CAR 15 of this report.

4.3 Baseline setting (22-26)

The PDD explicitly indicates that 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:

a. Continuation of the current situation
b. Direct energy production from the heat generated by a burning waste heap
c. Production of construction materials from waste heaps
d. Coal extraction from waste heaps without JI incentives

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

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, coal mining industry sector expansion plans, and the economic situation in the project sector. In this context, the following key factors that affect a baseline are taken into account:

a. Coal mining sector plays an absolute and crucial part in Ukraine, with coal being a factor of political sovereignty. Ukrainian economy is one of the world's most energy-consuming by primary energy consumption per GDP unit. 15/03/2006 The Cabinet of Ministers of Ukraine has approved the "Energy strategy of Ukraine till 2030". The energy strategy considers the research of non-traditional and renewable energy sources an important factor of energy safety improvement, reduction of anthropogenic impact on the environment and resistance to global climate change.

b. Most coal mining companies currently operating in Ukraine use equipment installed back in Soviet times.

c. The current practice of waste heap stabilization and extinction is consistent with the current Ukrainian legislation.Pursuant to the Law of Ukraine "On approval of safety rules in coal mines" waste heaps are considered potential pollutant sources. In a general case, ignited waste heaps should be extinguished and future ignition prevention measures should be taken, as stated in the Coal Mines Safety Rules. The document has weak effectiveness, so the relationship is in most cases regulated by the Code of Administrative Offences of Ukraine providing for mere insignificant penalties.

d. State support in the coal mining sector is provided in amounts of funds provided by the law of Ukraine on State Budget of Ukraine for the relevant year.

e. The current Ukrainian system of formation of prices for coal does not include an investment component for the development of waste heap demolition system and coal mining infrastructure in general. According to the Ukrainian legislation, Ltd. "Prominvest-Ekolohiia" is not obliged and has no incentives to implement new equipment, provided for by the project, at its own expense. Meanwhile, state investment programs in most cases are targeted at administrative and organizational implementations.

f. The project scenario requires attracting significant additional funds. Such investment is characterized by a significant payback period and high investment risks, that is why it is not attractive for investors.

g. Ukraine has no similar projects implemented without the JI mechanism.

Project participants selected the JI-specific approach and "Guidelines on criteria for baseline setting and monitoring" to establish the baseline.

All explanations, descriptions and analyses pertaining to the baseline in the PDD are adequate and the baseline is identified appropriately.

The identified areas of concern as to the baseline, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 16 – CAR 22; CL 04 - CL 07).

4.4 Additionality (27-31)

The most recent version of the "Tool for the demonstration and assessment of additionality" approved by the CDM Executive Board was used in accordance with the JI specific approach, defined pursuant to paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The PDD provides a justification of the applicability of the approach with a clear and transparent description, as per item 4.3 above.

The developer of the project proved that anthropogenic emissions under the project are lower than the emissions that would take place in the absence of the project activity.
Additionality proofs are provided.
Five plausible and realistic alternative scenarios of the project were identified:

- Alternative 1.1. Continuation of the current situation.
- Alternative 1.2. Direct energy production from the heat generated by a burning waste heap.
- Alternative 1.3. Production of construction materials from waste heaps.
- Alternative 1.4. Coal extraction from waste heaps without JI incentives
- Alternative 1.5. Systematic monitoring of waste heaps condition and regular fire prevention and extinguishing measures

and the mandatory compliance of the scenarios with the legislation and legal acts was demonstrated.

According to the "Tool for the demonstration and assessment of additionality" (Version 06.0.0) barrier analysis and common practice analysis were used in the PDD to justify additionality of the project.
Thus, the overall conclusion is that the project activity meets the criteria of additionality, is not a baseline scenario and is additional.
Additionality is demonstrated appropriately as a result of the analysis using the approach chosen.
The identified areas of concern as to the additionality, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 23, 24).

4.5 Project boundary (32-33)

The project boundary, which is defined in the PDD and in accordance with the specific approach, delineated by the physical, geographical location of Ltd. "Prominvest-Ekolohiia" mines, encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs), which are:

(i) Under the control of the project participants, such as:

- CO_2 emissions from consumption of fossil fuel (diesel fuel) for coal extraction from waste heaps;
- CH_4 emissions due to operation of coal industry
- CO_2 emissions from electricity consumption for coal mining
- CO_2 emissions from electricity consumption for coal beneficiation

(ii) Reasonably attributable to the project, such as:

- CO_2 emissions from waste heap combustion

(iii) Significant, i.e., as a rule of thumb, would by each source account on average per year over the crediting period for more than 1 per cent of the annual average anthropogenic emissions by sources of GHGs, or exceed an amount of 2,000 tonnes of CO_2 equivalent, whichever is lower.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD.

4.6 Crediting period (34)

The PDD states the starting date of the project as the date when The Management Board of Ltd. "Prominvest-Ekolohiia" made a decision to create a Joint Implementation project, and the starting date is 10/01/2008, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 7 years or 84 months – from January 10, 2008 to December 31, 2014.

The PDD states the length of the crediting period in years and months, which is 7 years or 84 months, and its starting date of the crediting period is 10/01/2008, which is the date the first emission reductions are expected to be 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 the section relating to the monitoring plan clearly states that a specific JI approach was chosen.

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 reporting forms, operational structure and management structure of the enterprise that will be applied when implementing the monitoring plan.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be 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: global warming potential for methane; net calorific value of coal; net calorific value of diesel fuel; carbon oxidation factor for coal; carbon oxidation factor for diesel fuel; carbon content in coal; carbon content in diesel fuel; average electricity consumption per tonne of coal produced in Ukraine; average electricity consumption per tonne of coal enriched at a beneficiation plant in Ukraine; carbon dioxide emission factor for electricity generation at TPPs and for its consumption; emission factor for non-controlled methane emissions from coal mining; probability of waste heap burning; methane density.

The monitoring plan draws on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" developed by the JISC, as appropriate, among which: baseline emissions (BEy), project emissions (PEy), net calorific value (NCVxx).

According to the guidelines for users of the JI PDD forms, revision # 04, the described approach to monitoring clearly states:

(i) Data and parameters not controlled throughout the crediting period but determined only once (and remain unchanged throughout the crediting period) and are available at the stage of determination.

ρ_{WHB}	Probability of waste heap burning, relative units
ρ_{CH4}	Methane density, t/m^3
EF_{CH4}	Emission factor for non-controlled methane emissions from coal mining, m^3/t

(ii) Data and parameters that are monitored throughout the crediting period.

$FC^{b}_{coal,y}$	Amount of coal produced by underground mining in the baseline scenario and combusted for energy generation in year y
$FC^{p}_{diesel,y}$	Diesel fuel consumption in the project in year y
GWP_{CH4}	Global warming potential for methane, t CO_2/t CH_4
NCV_{coal}	Net calorific value of coal, TJ/ths t
NCV_{diesel}	Net calorific value of diesel fuel, TJ/ths t
$OXID_{coal}$	Carbon oxidation factor for coal, relative units
$OXID_{diesel}$	Carbon oxidation factor for diesel fuel, relative units
$EF_{C,coal}$	Carbon content in coal, t C/TJ
$EF_{C,diesel}$	Carbon content in diesel fuel, t C/TJ
$N^{b}_{ELEC,coal}$	Average electricity consumption per tonne of coal produced in Ukraine, MWh/t
$N^{p}_{ELEC,coal}$	Average electricity consumption per tonne of coal enriched at a beneficiation plant in Ukraine, MWh/t
$EF_{CO2,ELEC}$	Carbon dioxide emission factor for electricity generation at TPPs and for its consumption, t CO_2/MWh;

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording.

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.

Project scenario

Project emissions are calculated as follows:

$$PE_y = PE^p_{diesel,y} \quad (1)$$

PE_y - GHG emissions in the project scenario in year *y*, t CO_2;

$PE^p_{diesel,y}$ - GHG emissions in the project scenario due to diesel fuel consumption as a result of project implementation in year *y*, t CO_2;

$[p]$ - index for project scenario;

$[diesel]$ - index for diesel fuel;

$[y]$ - index for the year of monitoring period.

$$PE^p_{diesel,y} = \frac{FC^p_{diesel,y}}{1000} \times NCV_{diesel,y} \times OXID_{diesel,y} \times EF_{C,diesel,y} \times \frac{44}{12} \quad (2)$$

$FC^p_{diesel,y}$ - diesel fuel consumption in year *y* of the project scenario, t;

$NCV_{diesel,y}$ - net calorific value of coal for year *y*, TJ/ ths t;

$OXID_{diesel,y}$ - carbon oxidation factor for diesel fuel for year *y*, relative units;

$EF_{C,diesel,y}$ - carbon content in diesel fuel for year *y*, t C/TJ;

$\frac{1}{1000}$ - tonnes to thousand tonnes conversion factor;

$\frac{44}{12}$ - stoichiometric ratio of carbon dioxide and carbon molecular weight, t CO_2/t C;

$[p]$ - index for project scenario;

$[y]$ - index for the year of monitoring period;

$[diesel]$ - index for diesel fuel;

$[C]$ - index for carbon.

Baseline scenario

Baseline emissions are calculated as follows:

$$BE_y = BE^b_{WHB,y} \quad (3)$$

BE_y - GHG emissions in the baseline scenario in year *y*, t CO_2;

$BE^b_{WHB,y}$ - GHG emissions in the baseline scenario due to waste heap burning in year *y*, t CO_2;

$[b]$ - index for baseline scenario;

$[WHB]$ - index for waste heap burning;

$[y]$ - index for the year of monitoring period.

$$BE^b_{WHB,y} = \frac{FC^b_{coal,y}}{1000} \times \rho_{WHB} \times NCV_{coal,y} \times OXID_{coal,y} \times EF_{C,coal,y} \times \frac{44}{12} \quad (4)$$

$FC^b_{coal,y}$ - amount of coal produced by underground mining in the baseline scenario and combusted for energy generation, equivalent to the amount of coal extracted from the waste heaps because of the project activity in year *y*, t;

ρ_{WHB} - probability of waste heap burning, relative units;

$NCV_{coal,y}$ - net calorific value of coal for year *y*, TJ/ ths t;

$OXID_{coal,y}$ - carbon oxidation factor for year *y*, relative units;

$EF_{C,coal,y}$ - carbon content in coal for year *y*, t C/TJ;

$\frac{1}{1000}$ - tonnes to thousand tonnes conversion factor;

$\frac{44}{12}$ - stoichiometric ratio of carbon dioxide and carbon molecular weight, t CO_2/t C;

$[b]$ - index for baseline scenario;

$[WHB]$ - index for waste heap burning;

$[y]$ - index for the year of monitoring period;

$[coal]$ - index for coal;

$[C]$ - index for carbon.

Leakage

Baseline leakage in year *y* is calculated as follows:

$$LE_y = LE^b_y + LE^p_y \quad (5)$$

LE_y - emissions in year *y*, t CO_2eq;

LE^b_y - baseline emissions in year *y*, t CO_2eq;

LE^p_y - leakage in the project scenario in year *y*, t CO_2eq;

$[b]$ - index for baseline scenario;

$[p]$ - index for project scenario;

$[y]$ - index for the year of monitoring period.

Baseline leakage in year *y* is calculated as follows:

$$LE_y^b = LE_{CH4,y}^b + LE_{ELEC,y}^b \quad (6)$$

$LE_{CH4,y}^b$ - leakage associated with uncontrolled methane emissions at mines in year *y*, t CO_2eq;

$LE_{ELEC,y}^b$ - leakage from electricity consumption from the grid during mining in year *y*, t CO_2eq;

$[b]$ - index for baseline scenario;

$[CH4]$ - index for methane;

$[ELEC]$ - index for electricity;

$[y]$ - index for the year of monitoring period.

Leakage due to non-controlled methane emissions in mines in the baseline in year *y* is calculated as follows:

$$LE_{CH4,y}^b = -FC_{coal,y}^b \times EF_{CH4,y} \times \rho_{CH4} \times GWP_{CH4} \quad (7)$$

$FC_{coal,y}^b$ - amount of coal produced by underground mining in the baseline scenario and combusted for energy generation in year *y*, t;

$EF_{CH4,y}$ - emission factor for non-controlled methane emissions from coal mining in year *y,* m^3/t;

ρ_{CH4} - methane density, t/m^3;

GWP_{CH4} - global warming potential, t CO_2/t CH_4;

$[b]$ - index for baseline scenario;

$[CH4]$ - index for methane;

$[coal]$ - index for coal;

$[y]$ - index for the year of monitoring period.

Leakage from electricity consumption from the grid during mining in year *y* are calculated as follows:

$$LE_{ELEC,y}^b = -FC_{coal,y}^b \times N_{ELEC,coal,y}^b \times EF_{CO2,ELEC} \quad (8)$$

$FC_{coal,y}^b$ - amount of coal produced by underground mining in the baseline scenario and combusted for energy generation in year *y,* t;

$N_{ELEC,coal,y}^b$ - average electricity consumption per tonne of coal produced in Ukraine in year *y*, m^3/t;

$EF_{CO2,ELEC}$ - carbon dioxide emission factor for electricity generation at TPPs and for its consumption, t CO_2/MWh;

$[ELEC]$ - index for electricity;

$[b]$ - index for baseline scenario;

$[CO2]$ - index for carbon dioxide;
$[coal]$ - index for coal;
$[y]$ - index for the year of monitoring period.

Project leakage in year *y* is calculated as follows:

$$LE_y^p = LE_{ELEC,y}^p \quad (9)$$

$LE_{ELEC,y}^p$ - leakage associated with uncontrolled methane emissions at mines in year *y*, t CO_2eq;
$[ELEC]$ - index for electricity;
$[p]$ - index for project scenario;
$[y]$ - index for the year of monitoring period.

Leakage from electricity consumption from the grid during coal beneficiation at a beneficiation plant in year *y* are calculated as follows:

$$LE_{ELEC,y}^p = FC_{coal,y}^p \times N_{ELEC,coal,y}^p \times EF_{CO2,ELEC} \quad (10)$$

$FC_{coal,y}^p$ - amount of coal produced by underground mining in the baseline scenario and combusted for energy generation in year *y,* t;
$N_{ELEC,coal,y}^p$ - average electricity consumption per tonne of coal enriched at a beneficiation plant in Ukraine in year *y*, MWh/t;
$EF_{CO2,ELEC}$ - carbon dioxide emission factor for electricity generation at TPPs and for its consumption, t CO_2/MWh;
$[ELEC]$ - index for electricity;
$[b]$ - index for baseline scenario;
$[CO2]$ - index for carbon dioxide;
$[coal]$ - index for coal;
$[y]$ - index for the year of monitoring period.

Emission reductions

Emission reductions in year *y* are calculated under the formula that follows:

$$ER_y = BE_y - PE_y - LE_y \quad (11)$$

ER_y - GHG emission reductions in year *y*, t CO_2eq;
BE_y - baseline emissions in year *y* of the baseline scenario, t CO_2eq;
PE_y - GHG emissions in the project scenario in year y, t CO_2eq;
LE_y - leakage in year y, t CO_2eq;
$[y]$ - index for the year of monitoring period.

The monitoring plan represents quality control procedures and quality assurance for the monitoring process, which are sufficiently described in tabular form in PDD Sections D.1.1.1., D.1.1.3. and D.2. This includes, where appropriate, provision and submission on request of information about calibration, as well as information about how data are recorded and / or how the applicability of the method and accuracy of data are assured.

The monitoring plan clearly establishes responsibility and authority in respect of monitoring actions. An operational structure was created to implement the project (see PDD version 02).

The data subject to monitoring and required for the determination and further verification will be archived and stored in paper and electronic form at Ltd. “Prominvest-Ekolohiia” for two years after the transfer of emission reduction units generated by the project.

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 equasions.

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.

The identified areas of concern as to the monitoring plan, project participants’ response and Bureau Veritas Certification’s conclusion are described in Appendix A to Determination Report (refer to CAR 25 - CAR 31).

4.8 Leakage (40-41)

This project will result in a net change in methane emissions due to the coal mining activities, as well as a net change in carbon dioxide emissions from additional electricity consumption during the mining activities.

Source of the leakage is fugitive methane emissions due to underground coal mining. These emissions are specific to the coal produced by underground mines.

Coal produced by the project activity is not mined but extracted from the waste heap through the dismantling and beneficiation. Therefore, coal

produced by the project activity substitutes the coal that would have been otherwise mined in the baseline.

The identified areas of concern as to the leakage, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CL 08).

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

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

The PDD provides the ex ante estimates of:

(a) Emissions for the project scenario (within the project boundary), which are 65 342 tons of CO_2eq for 2008-2012, 32 878 tons of CO_2eq for 2013-2014;

(b) Leakage for the baseline scenario (within the project boundary), which are -2 385 961 tons of CO_2eq for 2008-2012, --1 103 030 tons of CO_2eq for 2013-2014;

(c) Emissions for the baseline scenario (within the project boundary), which are 8 666 829 tons of CO_2eq for 2008-2012, 4 004 292 tons of CO_2eq for 2013-2014;

(d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are 10 987 448 tons of CO_2eq in 2008-2012, 5 074 444 tons of CO_2eq in 2013-2014.

The estimates referred to above are given:

(a) on an annual basis;

(b) from 10/01/2008 to 31/12/2014, covering the entire crediting period;

(c) based on primary sources and sources;

(d) for each GHG, which is CO_2;

(e) in tonnes of CO_2 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 formulae used for calculating the estimates referred above are given in Section 4.7. All formulae are consistent throughout the PDD.

For calculating the estimates referred to above, such key factors as the Ukrainian environmental legislation and other national legislation, as well as key relevant factors such as availability of funds for implementation of measures envisaged by the project, prices that are set by the state, modern technology and the ability to dismantle waste heaps, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above, such as documents and archival data of the enterprise, standards and statistical forms, results of periodic verifications are clearly identified, reliable and transparent.

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 over the crediting period by the total months of the crediting period, and multiplying by twelve.

Detailed algorithms of calculations and their results are described in sections D, E and Supporting Documents to the PDD.

The identified areas of concern as to the evaluation of emission reductions, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to the Determination Report (CAR 32).

4.10 Environmental impacts (48)

The PDD provides information on documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.

The PDD provides conclusion on 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 PDD also provides references to supporting documentation.

The problem issues revealed as to environmental impacts, comments of project participants and the opinion of Bureau Veritas Certification are described in Annex A of the Determination Report (refer to CAR 09).

4.11 Stakeholder consultation (49)

Stakeholder consultation was not undertaken as it is not required by the host party.

No problematic issues on stakeholder consultation were revealed.

4.12 Determination regarding small-scale projects (50-57)

N/a

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

N/a

4.14 Determination regarding programmes of activities (65-73)

N/a

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 "Reduction of greenhouse gases by demolition of waste heaps of Ltd. "PROMINVEST-EKOLOHIIA" in 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. According to this tool the PDD contains investment analysis and analysis of common practice to determine that the project activity isn't 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 determination revealed one pending issue related to the current determination stage of the project: the issue of the written approval of the project by the host Party (Ukraine). If the written approval by the host Country is provided, it is our opinion that the project as described in the Project Design Document, version 02 dated 04/12/2012 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Country criteria as well as expectations of the stakeholders.

The review of the project design documentation (version 02 dated 04/12/2012) 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 REFERENCE

Category 1 Documents:
Documents provided by CEP CARBON EMISSIONS PARTNERS S.A. that relate directly to the GHG components of the project.

/1/	PDD “Reduction of greenhouse gases by demolition of waste heaps of Ltd. “PROMINVEST-EKOLOHIIA”, version 01 dated 03/09/2012
/2/	PDD “Reduction of greenhouse gases by demolition of waste heaps of Ltd. “PROMINVEST-EKOLOHIIA”, version 02 dated 04/12/2012
/3/	Supporting Document 1. Calculation of GHG emission reductions under the project “Reduction of greenhouse gases by demolition of waste heaps of Ltd. “PROMINVEST-EKOLOHIIA”
/4/	Letter of Endorsement No. 3711/23/7 issued by the State Environmental Investment Agency of Ukraine dated 03/12/2012
/5/	Guidelines for users of the JI PDD form. Version 04, JISC.
/6/	Tool for the demonstration and assessment of additionality, Version 06.0.0.
/7/	Kyoto Protocol
/8/	Marrakech Accords, JI Methods
/9/	National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010
/10/	Ukraine’s Third National Communication on Climate Change under the Kyoto Protocol
/11/	Ukraine’s Fourth National Communication on Climate Change under the Kyoto Protocol
/12/	Ukraine’s Fifth National Communication on Climate Change under the Kyoto Protocol
/13/	Law of Ukraine "On environmental protection"
/14/	JI Guidelines. Appendix to decision 9/CDM.1
/15/	JI Guidance for determination and verification, version 01
/16/	Guidance on criteria for baseline setting and monitoring, JISC. Version 03

Category 2 Documents:

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

/1/	Passport of waste heap No.9 of Ltd. “Prominvest-Ekolohiia”
/2/	Passport of waste heap No.17 of Ltd. “Prominvest-Ekolohiia”
/3/	Passport of waste heap No.20 of Ltd. “Prominvest-Ekolohiia”
/4/	Passport of waste heap No.22 of Ltd. “Prominvest-Ekolohiia”
/5/	Passport of waste heap No.23 of Ltd. “Prominvest-Ekolohiia”
/6/	Passport of waste heap No.30 of Ltd. “Prominvest-Ekolohiia”
/7/	Passport of waste heap No.31-32 of Ltd. “Prominvest-Ekolohiia”
/8/	Passport of waste heap No.35 of Ltd. “Prominvest-Ekolohiia”
/9/	Passport of waste heap No.42 of Ltd. “Prominvest-Ekolohiia”
/10/	Passport of waste heap No.174 of Ltd. “Prominvest-Ekolohiia”
/11/	Passport of waste heap No.178 of Ltd. “Prominvest-Ekolohiia”

Persons interviewed:

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

	Name	Organisation	Title
/1/	Yu.V. Shentsev	Ltd. “Prominvest-Ekolohiia”	Deputy Director
/2/	A.V. Melnyk	Ltd. “Prominvest-Ekolohiia”	Financial Director
/3/	Yu.A. Potapov	Ltd. “Prominvest-Ekolohiia”	Chief Engineer
/4/	N.H. Chyzhov	Ltd. “Prominvest-Ekolohiia”	Chief Accountant
/5/	S.A. Chypilin	Ltd. “Prominvest-Ekolohiia”	Chief Power Engineer
/6/	E.N. Stetsenko	Ltd. “Prominvest-Ekolohiia”	Chief Economist
/7/	V.H. Prykhodko	Ltd. “Prominvest-Ekolohiia”	Geologist
/8/	H.M. Babyk	Ltd. “Prominvest-Ekolohiia”	Markscheider
/9/	S.O. Repinetskyi	“CEP” LLC	CEP CARBON EMISSIONS PARTNERS S.A. Consultant

ANNEX A: DETERMINATION PROTOCOL

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

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
Guidelines for Users of the JI PDD form Section A General description of the project				
A.1. Title of the project				
A.1	Is the title of the project presented?	The project title is presented: "Reduction of greenhouse gases by demolition of waste heaps of Ltd. "PROMINVEST-EKOLOHIIA"	OK	OK
A.1	Is the sectoral scope to which the project pertains presented?	Sectoral scope: **CAR 01.** Please add Sector 3 (Energy demand) to the sectoral scope in Section A.1. of the PDD.	**CAR 01**	OK
A.1	Is the current version number of the document presented?	The current version of the document: PDD, Version 02 dated 05/12/2012. Ref. to Section A.1.	OK	OK
A.1	Is the date when the document was created presented?	The date when the document was created: 05/12/2012	OK	OK
A.2. Description of the project				
A.2	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	**CAR 02.** Please indicate the purpose of the project activity in Section A.2. of the PDD. **CAR 03.** Please mark the limit (add headings) between the information on baseline and project scenarios.	**CAR 02** **CAR 03**	OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	c) Project scenario (expected outcome, including a technical description)?			
A.2	Is the history of the project (incl. its JI component) briefly summarized?	**CAR 04.** In PDD Section A.2 please provide information on the history of the project activity.	**CAR 04**	OK
A.3. Project participants				
A.3	Are project participants and Party(ies) involved in the project listed?	**CAR 05.** Please indicate the foreign party involved which is expected to issue a Letter of Approval after the determination in Section A.3. of the PDD.	**CAR 05**	OK
A.3	Is the data of the project participants presented in tabular format?	The data of the project participants is presented in tabular format.	OK	OK
A.3	Is contact information provided in Annex 1 of the PDD?	The contact information of Ltd. "Prominvest-Ekolohiia" and Carbon Emissions Partners S.A. is provided in Annex 1 of the PDD. **CAR 06.**Decree No.33 of NEIA of Ukraine requires potential ERU buyer to be indicated in the PDD. Please provide relevant information in Annex 1. **CAR 07.** Please provide a direct phone and an e-mail of CEP Carbon Emissions Partners S.A.	**CAR 06** **CAR 07**	OK OK
A.3	Is it indicated, if it is the case, that the Party involved is a host Party?	Ukraine is the Host Party.	OK	OK
A.4 Technical description of the project				
Location of the project				

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
A.4.1.1	Host Party(ies)	Ukraine is the Host Party.	OK	OK
A.4.1.2	Region/State/Province etc.	Krasne village, Luhansk region, Ukraine.	OK	OK
A.4.1.3	City/Town/Community etc.	Krasne village, Ukraine.	OK	OK
A.4.1.4	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page).	Information about location is given in Section A.4.1.4 of the PDD. **CAR 08.** Please provide a photo that shows the location of each project in Section A.4.1.4.	**CAR 08**	OK
A.4.2. Technologies to be employed, or measures, operations or actions to be implemented by the project				
A.4.2	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	PDD Section A.4.2 provides the description of the main stages of the project implementation, the annual project activities schedule, some relevant technical data relating to key equipment to be installed as well as project activities. Project engineering represents the current cutting-edge practice. **CAR 09.** Please provide information on the essence of the project in Section A.4.2. **CAR 10.** Please provide the project schedule in Section A.4.2. of the PDD. **CL 01.** Please provide information on the necessity of special personnel training in Section A.4.2. **CL 02.** Please provide information on whether the project technology is in line with the current global practice in Section A.4.2. **CL 03.** Please clarify whether the project	**CAR 09** **CAR 10** **CL 01** **CL 02** **CL 03**	OK OK OK OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		equipment is planned to be replaced during the project activity.		
A.4.3. 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				
A.4.3	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	**CAR 11.** Please indicate why emission reductions would not occur in the absence of the project. **CAR 12.** Information on project consistency with the national legislation should be provided in Section B.2. of the PDD, not Section A.4.3.	**CAR 11** **CAR 12**	OK OK
A.4.3	Is it provided the estimation of emission reductions over the crediting period?	The estimation of emission reductions over the crediting period is provided in Section A.4.3.1. of the PDD. **CAR 13.** Table 13 of Section A.4.3.1 presenting GHG emission reductions do not comply with the format recommended by the Guidelines for users of the JI PDD form, version 04. **CAR 14.** Emission reductions, indicated in Section A.4.3.1. of the PDD do not correspond to those in the Supporting Document.	**CAR 13** **CAR 14**	OK OK
A.4.3	Is the estimated annual reduction for the chosen credit period in tCO_2e provided?	Estimated annual reduction for the chosen credit period is presented in tCO_2e.	OK	OK
A.4.3	Are the data from questions above presented in tabular format?	Information for the credit period and after the credit period is presented in tabular format. Ref. to	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		Section A.4.3.1. of the PDD version 02.		
A.4.3.1. Estimated amount of emission reductions over the crediting period				
A.4.3.1	Is the length of the crediting period Indicated?	The length of the crediting period is indicated in the PDD Section A.4.3.1. and Section C.	OK	OK
A.4.3.1	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent provided?	Total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent are provided in accordance with the calculated values in the tables of Section A of PDD and the Supporting documents.	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	**CAR 15.** The project has no approval of the Host Party and the investing country. To obtain the Letter of Approval the final Determination report must be submitted to the State Environmental Investment Agency of Ukraine that includes this Determination Protocol and the list of sources of Reference Information. A Letter of Approval by the Government of another party involved from the country-participant has not been obtained at the current stage of the Project either. **CAR 15** will be closed after the Letter of Approval is issued by the Party involved.	**CAR 15**	Pending decision.

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
19	Does the PDD identify at least the host Party as a "Party involved"?	The Host Party involved is Ukraine.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	Reference to **CAR 15**.	**CAR 15**	Pending decision.
20	Are all the written project approvals by Parties involved unconditional?	Reference to **CAR 15**.	**CAR 15**	Pending decision.
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? − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	Party involved 1: Ukraine (the Host Party), legal entity is Ltd. "Prominvest-Ekolohiia". Party involved 2: Estonia, legal entity is LHCarbon OÜ. The project participants will be authorized in accordance with the relevant project approvals. Pending **CAR 15.**	**CAR 15**	Pending decision.
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? − JI specific approach − Approved CDM methodology approach	The baseline chosen is described in Section B.1 of the PDD. A specific JI approach is used for setting the baseline.	OK	OK
JI specific approach only				

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	The choice of the applicable baseline for the project is justified; theoretical description is provided in Section B.1 of PDD version 02. **CAR 16.** The title of the Guidance used to set the baseline is incorrect in Section B.1. of the PDD. **CAR 17.** Information on consistency of alternatives with the national legislation should be provided in Section B.2. of the PDD, not Section B.1. **CAR 18.** Please verify numbering of sub-steps in Section B.1. of the PDD. **CAR 19.** Table 3 in PDD Section B.1. is irrelevant since the same data are provided in tables according to the Guidelines for Users of the JI PDD form Version 04, JISC **CAR 20.** Please provide data from Table 4 in tables according to the Guidelines for Users of the JI PDD form, Version 04, JISC. **CAR 21.** Please check data on metering frequency of the parameters from tables of Section B.1. of the PDD. **CL 04.** Please provide a reference to the "Tool for the demonstration and assessment of additionality" in Section B.1. **CL 05.** Please provide references to the Guidance on criteria for baseline setting and monitoring,	**CAR 16** OK **CAR 17** OK **CAR 18** OK **CAR 19** OK **CAR 20** OK **CAR 21** OK **CL 04** OK **CL 05** OK **CL 06** OK **CL 07** OK	

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		Version 03. **CL 06.** Please provide a reference to JI project UA1000329 "Demolition of waste heap #2 at mine #22 "LISOVA". **CL 07.** Please provide references to the "National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010" in Section B.1.		
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? − 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) In a transparent manner with regard	The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline was established: a) by listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one: ➢ Alternative 1.1. Continuation of the current situation. ➢ Alternative 1.2. Direct energy production from the heat generated by a burning waste heap. ➢ Alternative 1.3. Production of construction materials from waste heaps. ➢ Alternative 1.4. Coal extraction from waste	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (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?	heaps without JI incentives ➢ Alternative 1.5. Systematic monitoring of waste heaps condition and regular fire prevention and extinguishing measures b) taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, coal mining industry sector expansion plans, and the economic situation in the project sector. In this context, the following key factors that affect a baseline are taken into account: Coal mining sector plays an absolute and crucial part in Ukraine, with coal being a factor of political sovereignty. Ukrainian economy is one of the world's most energy-consuming by primary energy consumption per GDP unit. 15/03/2006 The Cabinet of Ministers of Ukraine has approved the "Energy strategy of Ukraine till 2030". The energy strategy considers the research of non-traditional and renewable energy sources an important factor of energy safety improvement, reduction of anthropogenic impact on the environment and resistance to global climate change. Most coal mining companies currently operating in Ukraine use equipment installed back in Soviet		

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		times. The current practice of waste heap stabilization and extinction is consistent with the current Ukrainian legislation.Pursuant to the Law of Ukraine “On approval of safety rules in coal mines” waste heaps are considered potential pollutant sources. In a general case, ignited waste heaps should be extinguished and future ignition prevention measures should be taken, as stated in the Coal Mines Safety Rules. The document has weak effectiveness, so the relationship is in most cases regulated by the Code of Administrative Offences of Ukraine providing for mere insignificant penalties. The current Ukrainian system of formation of prices for coal does not include an investment component for the development of waste heap demolition system and coal mining infrastructure in general. According to the Ukrainian legislation, Ltd. “Prominvest-Ekolohiia” is not obliged and has no incentives to implement new equipment, provided for by the project, at its own expense. Meanwhile, state investment programs in most cases are targeted at administrative and organizational implementations.		

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		State support in the coal mining sector is provided in amounts of funds provided by the law of Ukraine on State Budget of Ukraine for the relevant year. (c) In a transparent manner with regard to the choice of JI approach and assumptions, parameters, data sources and key factors for identifying initial conditions listed in tabular format in Section B.1. (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. The baseline is identified, the description is given in Section B of the PDD.		
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?	When the project was under development, there were no approved CDM methodologies for this type of activity. Therefore, the proposed project applies a specific approach to baseline setting and monitoring based on provisions of the following documents:	OK	OK
25	If a multi-project emission factor is	The PDD applies the multi-project emission factor	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	used, does the PDD provide appropriate justification?	to calculate GHG emission reductions.		
CDM methodology approach only				
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 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	The PDD indicates that the project scenario is not a part of the established baseline scenario. It is also stated that the project will lead to emission reductions. **CAR 22.** Section B.1. of the PDD should be corrected according to the "Tool for the demonstration and assessment of additionality", using a stepwise approach.	**CAR 22**	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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?	Detailed analysis described in Section A.4.3, B.1 and B.2, shows that emissions of the baseline scenario are likely to exceed emissions of the project scenario due to the implementation of project activities.	OK	OK
29 (b)	Are additionality proofs provided?	**CAR 23.** Additionality should be demonstrated based on an investment analysis or a barrier analysis. Please provide relevant analysis in Section B.2. of the PDD.	**CAR 23**	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	Ref. to CAR 22, 23.	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?	**CAR 24.** Please indicate the basis (document) for the demonstration of the additionality in Section B.2. of the PDD.	**CAR 24**	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	I. Under the control of the project participants, such	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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?	as: - CO_2 emissions from consumption of fossil fuel (diesel fuel) for coal extraction from waste heaps; - CH_4 emissions due to operation of coal industry - CO_2 emissions from electricity consumption for coal mining - CO_2 emissions from electricity consumption for coal beneficiation II. Reasonably attributable to the project, such as: - CO_2 emissions from waste heap combustion III. Significant, i.e., as a rule of thumb, would by each source account on average per year over the crediting period for more than 1 per cent of the annual average anthropogenic emissions by sources of GHGs, or exceed an amount of 2,000 tonnes of CO_2 equivalent, whichever is lower.		
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 boundary is defined on the basis of case-by-case assessment of different emission sources.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
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 if it is possible?	The project boundary is presented in tabular and graphic form to be understandable enough.	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?	All gases and sources included are explicitly stated. Ref. to Section B of the 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 action of the project will begin or began?	The starting date of the project is deemed 10/01/2008, when the Management Board of Ltd. "Prominvest-Ekolohiia" made a decision to create a Joint Implementation project. The project's starting date is identified and specified in Section C.1. of the PDD.	OK	OK
34 (a)	Is the starting date after 2000?	The starting date is after 2000.	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	Project lifetime is from 01/10/2008 to 31/12/2014 (7 years, or 84 months). The forecasted duration of waste heap demolition works for the JI project is 7 years, or 84 months.	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	The duration of the crediting period in years and months is 7 years, or 84 months.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
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 on the date when the first emission reductions are expected, namely January 10, 2008.	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?	ERU generation belongs to the first commitment period of 5 years (January 10, 2008 – December 31, 2012).	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 reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	The PDD states that the prolongation of the crediting period beyond 2012 is subject to approval of the host party and estimation of emission reductions is presented separately for those until 2012 and those after 2012 in the relevant sections of the PDD. If after the first commitment period under the Kyoto protocol it is prolonged, the crediting period under the project will be prolonged by 2 years until December 31, 2014.	OK	OK
Monitoring plan				
35	Does the PDD clearly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology	The proposed project uses a JI-specific approach in accordance with paragraph 9 (a) of the JI "Guidance on criteria for baseline setting and monitoring", Version 03.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	approach.			
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?	The monitoring plan specifies all decisive factors for the control and reporting of project performance: quality control (QC) and quality assurance (QA) procedures; operational and management structures that will be applied when implementing the monitoring plan.	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 removals to be monitored?	The monitoring plan specifies the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions.	OK	OK
36 (b)	If defailt 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	**CAR 25.** The data source for the parameter $NCV_{diesel,y}$ in Section D.1.1 of the PDD is incorrect. **CAR 26.** The data source for the parameter $OXID_{diesel,y}$ in Section D.1.1 of the PDD is incorrect. **CAR 27.** The data source for the parameter $EF_{C,diesel,y}$ in Section D.1.1 of the PDD is incorrect. **CAR 28.** Please verify the recording frequency for	**CAR 25** **CAR 26** **CAR 27** **CAR 28** **CAR 29**	OK OK OK OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	transparent manner?	parameters provided in Sections D.1.1. and D.1.3. **CAR 29.** Parameter $EF_{CO2,ELEC}$ is described incorrectly in formula D8 of the PDD.		
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?	The monitoring plan clearly indicates how the values are to be selected and justified.	OK	OK
36 (b) (ii)	For other values, - Does the monitoring plan clearly indicate the precise references from which these values are taken? - Is the conservativeness of the values provided justified?	**CAR 30.** Please provide references to sources of parameters in Section D.	**CAR 30**	OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Refer to section D of the PDD.	OK	OK
36 (b) (iv)	Are International System Unit (SI units) used?	The International System Units are used for some parameters.	OK	OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc.	Relevant data necessary for determining the baseline of anthropogenic emissions of	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	that are used to calculate baseline emissions or net removals but are obtained through monitoring?	greenhouse gases within the project boundary is presented in table D.1.1.3. of the PDD.		
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	The use of parameters, coefficients and variables is consistent 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 baseline setting and monitoring"?	The monitoring plan is identified on the basis of the Guidance on criteria for baseline setting and monitoring, Version 03.	OK	OK
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	**CAR 31.** Please provide the following information in PDD Section D.1.: (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.	**CAR 31**	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	determination? (iii) Data and parameters that are monitored throughout the crediting period?			
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	In tables of parameters provided in section D.1.1.1. of the PDD the time of monitoring (frequency) and the source of data to be used, as well as recording method are indicated for all the monitored parameters and data.	OK	OK
36 (f)	Does the monitoring plan elaborate 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?	All algorithms and formulae used for the estimation of baseline and project emissions are indicated and explained in the PDD.The description of formulae is given in Section D of the PDD.	OK	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Refer to Section 36 (f) of this table.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts etc. are used.	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?	Yes. Refer to section D of the PDD.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes, algorithms/procedures comply with state norms and are conservative.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Uncertainty in parameters used is low taking into account the algorithms of data monitoring.	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?	There is consistency between the elaboration on the baseline scenario and calculating the baseline emission in the monitoring plan and in tables.	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	The formulae used in the PDD are sufficiently described.	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Ltd. “Prominvest-Ekolohiia” is the owner of the project, which will implement the provisions of this monitoring plan using its organizational and management structure. Company administration headed by the director of the company is responsible for performance of monitoring, data collection, registration, visualization, storage and reporting of data that were monitored, and periodic inspection of measuring instruments. Detailed structure and senior staff members of the Management Group will be submitted in the monitoring before the initial and first periodic verification.	OK	OK
36 (f) (vii)	Are references provided as necessary?	Yes, all references are provided.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All 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?	N/A	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?	For the sake of conservativeness of parameters, metering equipment is subject to regular calibration and the latest versions of regulations and specifications are used. If the latest versions are unavailable, the previous versions are used.	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 the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	The monitoring plan identifies that constant routine calibration of measuring equipment is carried out and the latest editions of the regulatory and technical documentation is used.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	Yes.	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?	Verification (calibration) of measurement devices is carried out in accordance with industrial standards, approved methodologies on metering devices verification/calibration, as well as with the state standards of Ukraine.	OK	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Detailed operational structure and management structure is provided in the Annex 3 of the PDD.	OK	OK
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 under the project does not require changes in existing accounting system and data collection.	OK	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of	Tables D.1.1.1 and D.1.1.3 provide compilation of all data needed to monitor project and baseline	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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?	emissions.		
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?	Data to be monitored and required for determination will be kept for two years after the last transfer of ERUs for the project.	OK	OK
37	If selected elements or combinations of approved CDM methodologies or 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?	When the project was under development, there were no approved CDM methodologies for this type of activity. Therefore, the proposed project applies a specific approach to baseline setting and monitoring based on provisions of the following documents:	OK	OK
Approved CDM methodology approach only_Paragraphs 38(a) – 38(d)_Not applicable				
Applicable to both JI specific approach and approved CDM methodology approach				
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period:	No periods to overlap during the crediting period are expected.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?			

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
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?	Leakage was estimated in accordance with the formulae given in Section D.1.1.2. For the period of 2004-2011, ex-post data on company output are used, while for the period of 2012-2014, ex-ante data are used taken from the waste heap demolition plan. **CL 08.** Please provide relevant comment on the negative value of leakage in the project.	**CL 08**	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	The PDD states that there isn't any leakage.	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 (b) Direct assessment of emission reductions	In the PDD the approach of estimation of emissions in the baseline scenario and in the project scenario is indicated. **CAR 32.** Estimated baseline emissions are incorrect.	**CAR 32**	OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the	PDD provides estimates of: (a) Emissions in the project scenario (Section E.1) (b) Leakage (Section E.2) (c) Emissions in the baseline scenario (Section	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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?	E.4) (d) Emission reductions adjusted by leakage (Section E.6).		
44	If the approach (b) 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? (d) Emission reductions or enhancements of net removals adjusted by leakage?	N/A	N/A	N/A
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-	(a) Estimates in 43 are given on the periodic basis, in tonnes of CO_2 equivalent, on a source-by-source basis, before, during and after the crediting period. (b) The formulae used in PDD are consistent. (c) Key factors influencing baseline emissions and activity level of the project and risks associated	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	sink basis? (iv) For each GHG? (v) In tonnes of CO_2 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 formulae used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 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	with the project are taken into account, as appropriate. (d) Data sources used to calculate the estimates are clearly identified, reliable and transparent. (e) Emission factors were taken from the defined sources. (f) Estimation in 43 is based on conservative assumptions and the most plausible scenario in a transparent manner. (g) Estimates in 43 are consistent throughout the PDD. (h) The annual average of estimated emission reductions are calculated correctly (by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve).		

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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 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 de facto, does the PDD include an illustrative forecasted emissions or net removals calculation?	The baseline for every JI project should be set according to Annex B to Decision 9/CMP.1 ("Guidelines for the implementation of Article 6 of the Kyoto Protocol") , and according to the "Guidance on Criteria for Baseline Setting and Monitoring, issued by the supervisory JI (JISC). Forecasted emissions calculation is clearly provided in the PDD.	OK	OK
Approved CDM methodology approach only_Paragraphs 47(a) – 47(b)_Not applicable				

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
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?	The environmental impacts of the project have been sufficiently described **CL 09.** Please provide references to regulatory documents mentioned in Section F.1. of the PDD.	**CL 09**	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 impact assessment undertaken in accordance with the procedures as required by the host Party?	The environmental impacts of the project have been sufficiently described.	OK	OK
Stakeholder consultations				
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?	The Host Party does not put forward the requirement to consult with stakeholders to JI projects. Stakeholders' comments will be collected during the publication of the project documents on the Internet during the determination process.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(b) The nature of the comments? (c) A description on whether and how the comments have been addressed?			
Determination regarding small-scale projects (additional elements for assessment)				
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
Determination regarding programmes of activities (additional/alternative elements for assessment)				

Table 2 RESOLUTION OF CORRECTIVE ACTION AND CLARIFICATION REQUESTS

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 01. Please add Sector 3 (Energy demand) to the sectoral scope in Section A.1. of the PDD.	A.1	Relevant information is provided in Section A.2. of the PDD. See PDD version 02.	The relevant information is provided, the issue is closed.
CAR 02. Please indicate the purpose of the project activity in Section A.2. of the PDD.	A.2	The proposed project is aimed at GHG emission reduction by complete demolition of the waste heaps of mines #20, #42, #3-14, #22 and Engels Mine of Ltd. "Prominvest-Ekolohiia", which are owned by the company located in Krasne village of Luhansk region. The project activity will prevent greenhouse gases emissions to the atmosphere.	The relevant information is provided, the issue is closed.
CAR 03. Please mark the limit (add headings) between the information on baseline and project scenarios.	A.2	The limit between the information on baseline and project scenarios is marked. Ref. to Section A.2. of the PDD version 02.	Relevant actions are taken. The issue is closed.
CAR 04. In PDD Section A.2 please provide information on the history of the project activity.	A.2	Brief history of the project activity is provided in Section A.2. PDD version 02.	The information is provided, the issue is closed.
CAR 05. Please indicate the foreign party involved which is expected to issue a Letter of Approval after the determination in Section A.3. of the PDD.	A.3	The relevant information is provided. Ref. to Section A.3. PDD	The information is provided, the issue is closed.

CAR 06. Decree No.33 of NEIA of Ukraine requires potential ERU buyer to be indicated in the PDD. Please provide relevant information in Annex 1.	A.3	The relevant information is provided. Ref. to Annex 1 to the PDD.	The information is provided, the issue is closed.
CAR 07. Please provide a direct phone and an e-mail of CEP Carbon Emissions Partners S.A.	A.3	A direct phone and an e-mail of CEP Carbon Emissions Partners S.A. are provided in Annex 1. Ref. to PDD version 02.	The information is provided, the issue is closed.
CAR 08. Please provide a photo that shows the location of each project in Section A.4.1.4.	A.4.1.4.	Relevant photos have been provided. See PDD version 02.	The information is provided, the issue is closed.
CAR 09. Please provide information on the essence of the project in Section A.4.2.	A.4.2	The proposed project is aimed at the reduction of anthropogenic emissions. Emissions are reduced due to: - Removal of GHG emission sources associated with waste heap combustion by dismantling of waste heaps; - Reduction of uncontrolled emissions of methane due to replacement of coal that would have been extract by underground mining; - Lower electricity consumption during waste heap dismantling against electricity consumption during coal mining.	The information is provided, the issue is closed.
CAR 10. Please provide the project schedule in Section A.4.2. of the PDD.	A.4.2	The project schedule is provided in Section A.4.2. of the PDD. Ref. to PDD version 02.	The information is provided in the corresponding section. The issue is closed.
CAR 11. Please indicate why emission reductions would not occur in the absence	A.4.3	The absence of project activity would provide for the continuation of the	The relevant information is provided. The issue is closed.

of the project.		situation existing at the beginng of the project activity, where the probability of waste heap ignition is high. Therefore, greenhouse gas emission reductions will not occur in this case.	
CAR 12. Information on project consistency with the national legislation should be provided in Section B.2. of the PDD, not Section A.4.3.	A.4.3	Information on project consistency with the national legislation has been moved th the relevant section.	The issue is closed as relevant actions are taken.
CAR 13. Table 13 of Section A.4.3.1 presenting GHG emission reductions do not comply with the format recommended by the Guidelines for users of the JI PDD form, version 04.	A.4.3	The table has been corrected. Ref. to PDD version 02.	Relevant corrections are made, the issue is closed.
CAR 14. Emission reductions, indicated in Section A.4.3.1. of the PDD do not correspond to those in the Supporting Document.	A.4.3	Relevant corrections of emission reductions have been made in Section A.4.3.1. of the PDD version 02.	Relevant corrections are made, the issue is closed.
CAR 15. The project has no approval of the Host Party and the investing country.	19	To obtain the Letter of Approval the final Determination report must be submitted to the State Environmental Investment Agency of Ukraine that includes this Determination Protocol and the list of sources of Reference Information. A Letter of Approval by the Government of another party involved from the country-participant has not been obtained at the current stage of the Project either.	The issue will be closed after the Letters of Approval are issued by the Parties involved.
CAR 16. The title of the Guidance used to set the baseline is incorrect in Section B.1. of the PDD.	23	The baseline for every JI project should be set according to Annex B to Decision 9/CMP.1 ("Guidelines for the	Relevant corrections are made, the issue is closed.

		implementation of Article 6 of the Kyoto Protocol") , and according to the "Guidance on Criteria for Baseline Setting and Monitoring, issued by the supervisory JI (JISC).	
CAR 17. Information on consistency of alternatives with the national legislation should be provided in Section B.2. of the PDD, not Section B.1.	23	Information on project consistency with the national legislation has been moved th the relevant section.	The issue is closed as relevant actions are taken.
CAR 18. Please verify numbering of sub-steps in Section B.1. of the PDD.	23	Sub-step numbering has been checked. Relevant corrections have been made.	The issue is closed as relevant actions are taken.
CAR 20. Please provide data from Table 4 in tables according to the Guidelines for Users of the JI PDD form, Version 04, JISC.	23	Data from Table are provided 4 in tables according to the Guidelines for Users of the JI PDD form Version 04, JISC	The issue is closed as relevant actions are taken.
CAR 21. Please check data on metering frequency of the parameters from tables of Section B.1. of the PDD.	23	Data on metering frequency of the parameters from tables of Section B.1. of the PDD have been verified. Relevant corrections have been made.	The issue is closed as corresponding changes are made.
CAR 22. Section B.1. of the PDD should be corrected according to the "Tool for the demonstration and assessment of additionality", using a stepwise approach.	23	Section B.1. of the PDD has been corrected according to the "Tool for the demonstration and assessment of additionality", using a stepwise approach.	The issue is closed as corresponding changes are made.
CAR 23. Additionality should be demonstrated based on an investment analysis or a barrier analysis. Please provide relevant analysis in Section B.2. of the PDD.	29 (b)	Justification of additionality is performed by means of barrier analysis.	The issue is closed as relevant actions are taken.
CAR 24. Please indicate the basis (document) for the demonstration of the	30	Additionality of the project activity is demonstrated and assessed below using	The relevant information is provided, the issue is closed.

additionality in Section B.2. of the PDD.		the "Tool for the demonstration and assessment of additionality" (Version 06.0.0).	
CAR 25. The data source for the parameter $NCV_{diesel,y}$ in Section D.1.1 of the PDD is incorrect.	36(b)	National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010	Corrections are made, the issue is closed.
CAR 26. The data source for the parameter $OXID_{diesel,y}$ in Section D.1.1 of the PDD is incorrect.	36(b)	National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010	Corrections are made, the issue is closed.
CAR 27. The data source for the parameter $EF_{C,diesel,y}$ in Section D.1.1 of the PDD is incorrect.	36 (b)	National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010	Corrections are made, the issue is closed.
CAR 28. Please verify the recording frequency for parameters provided in Sections D.1.1. and D.1.3.	36 (b)	Please verify the recording frequency for parameters provided in Sections D.1.1. and D.1.3. Relevant corrections have been made.	Corrections are made, the issue is closed.
CAR 29. Parameter $EF_{CO2,ELEC}$ is described incorrectly in formula D8 of the PDD.	36 (b)	$EF_{CO2,ELEC}$ - carbon dioxide emission factor for electricity generation at TPPs and for its consumption, t CO_2/MWh.	Corrections are made, the issue is closed.
CAR 30. Please provide references to sources of parameters in Section D.	36 (b) (ii)	References to sources of parameters in Section D have been verified. Relevant corrections have been made.	Corrections are made, the issue is closed.
CAR 31. Please provide the following information in PDD Section D.1.: (i) Data and parameters that are not monitored throughout the crediting period,	36 (d)	Relevant information is provided in Section D.1 of the PDD version 02.	The information is provided, the issue is closed.

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.			
CAR 32. Estimated baseline emissions are incorrect.	42	Relevant corrections have been made in Section E.4. of PDD version 02.	Corrections are made, the issue is closed.
CL 01. Please provide information on the necessity of special personnel training in Section A.4.2.	A.4.2	There is no intensive preliminary training the project calls for. As many staff members as needed can undergo basic training on the site where the project is carried out. The staff, particularly heavy equipment operators, truck and excavator drivers, mechanics and electrician, work on the site of project implementation. Local resources are used to meet the project needs for maintenance – the company's workers who service its equipment as well as repair contractors.	The issue is closed as relevant information is provided.
CL 02. Please provide information on whether the project technology is in line with the current global practice in Section A.4.2.	A.4.2	This waste heap demolition scheme with the use of auxiliary technologies complies with all modern requirements of global practice on utilization of mining consequences.	The issue is closed as relevant information is provided.

CL 03. Please clarify whether the project equipment is planned to be replaced during the project activity.	A.4.2	This waste heap demolition scheme with the use of auxiliary technologies does not require any technological changes in project implementation.	The issue is closed as relevant information is provided.
CL 04. Please provide a reference to the "Tool for the demonstration and assessment of additionality" in Section B.1.	23	Relevant reference has been provided. Ref. to PDD version 02.	The issue is closed as relevant reference is provided.
CL 05. Please provide references to the Guidance on criteria for baseline setting and monitoring, Version 03.	23	Relevant reference has been provided. Ref. to PDD version 02.	The issue is closed as relevant reference is provided.
CL 06. Please provide a reference to JI project UA1000329 "Demolition of waste heap #2 at mine #22 "LISOVA".	23	Relevant reference has been provided. Ref. to PDD version 02.	The issue is closed as relevant reference is provided.
CL 07. Please provide references to the "National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010" in Section B.1.	23	Relevant reference has been provided. Ref. to PDD version 02.	The issue is closed as relevant reference is provided.
CL 08. Please provide relevant comment on the negative value of leakage in the project.	40 (a)	Leakage is negative because it is attributable to the baseline scenario.	The issue is closed as relevant information is provided.
CL 09. Please provide references to regulatory documents mentioned in Section F.1. of the PDD.	48 (a)	Relevant references have been provided. Ref. to PDD version 02.	The issue is closed as relevant references are provided.