DETERMINATION REPORT

"MT-INVEST CARBON" LLC

DETERMINATION OF THE IMPLEMENTATION OF TECHNOLOGICAL MODERNIZATION OF LLC "TH "SHEPETIVSKY SUGAR"

REPORT NO. UKRAINE-DET/0557/2012

REVISION NO. 02

BUREAU VERITAS CERTIFICATION

Date of first issue:	Organizational unit:
21/09/2012	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
"MT-Invest Carbon" LLC	Iaroslav Falendysh

Summary:

Bureau Veritas Certification has made the determination of the "Implementation of technological modernization of LLC "TH "Shepetivsky Sugar" project of "MT-Invest Carbon" LLC located in Shepetivka town of Khmelnitsk region, Ukraine, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The determination scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

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

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

Report No.:	Subject Group:
UKRAINE-det/0557/2012	JI

Project title:
Implementation of technological modernization of LLC "TH "Shepetivsky Sugar"

Work carried out by:
Kateryna Zinevych – Team leader, lead verifier
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Date of this revision:	Rev. No.:	Number of pages:
30/10/2012	02	72

Indexing terms

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Table of Contents *Page*

1 INTRODUCTION

«MT-Invest Carbon» LLC has commissioned Bureau Veritas Certification to determine its JI project “Implementation of technological modernization of LLC “TH “Shepetivsky Sugar” (hereafter called “the project”) in Shepetivka town, Khmelnitsk region, Ukraine.

This report summarizes the findings of the determination of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

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

UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

1.2 Scope

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

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

1.3 Determination team

The determination team consists of the following personnel:

Kateryna Zinevyh
Team Leader, Bureau Veritas Certification Climate Change Lead Verifier

Volodymyr Kulish
Team Member, Bureau Veritas Certification Climate Change Verifier

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification Internal Technical Reviewer

2 METHODOLOGY

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

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

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

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

2.1 Review of Documents

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

To address Bureau Veritas Certification corrective action and clarification requests, «MT-Invest Carbon» LLC revised the PDD and resubmitted it as version 2.0.

The determination findings presented in this report relate to the project as described in the PDD versions 1.0 dated 20/07/2012, 2.0 dated 21/09/2012 and 3.0 dated 29/10/2012.

2.2 Follow-up Interviews

On 27/07/2012 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 LLC “TH “Shepetivsky Sugar” and «MT-Invest Carbon» LLCwere interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
LLC “TH “Shepetivsky Sugar”	➢ Implementation schedule ➢ Project management organization ➢ Evidence and records on reconstruction and new equipment and its operation ➢ Environmental impact assessment ➢ Responsibilities and authorities on project monitoring ➢ Monitoring equipment ➢ Quality control and quality assurance procedures ➢ Negative environmental impact ➢ Local stakeholders and community comments
"MT-Invest Carbon" LLC	➢ Applicability of methodology ➢ Baseline and Project scenarios ➢ Barrier analysis ➢ Additionality justification ➢ Common practice analysis ➢ Monitoring plan ➢ Conformity of PDD to 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.

If the determination team, in assessing the PDD and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to JI project requirements, it will raise these issues and inform the project participants of these issues in the form of:

(a) Corrective action request (CAR), requesting the project participants to correct a mistake in the published PDD that is not in accordance with the (technical) process used for the project or relevant JI project requirement or that shows any other logical flaw;

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

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

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

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

3 PROJECT DESCRIPTION

The project is aimed at achieving greenhouse gases emission reductions through decreasing specific natural gas and electricity consumption during sugar production, and advancing waste management practices at LLC “TH “Shepetivsky Sugar”. As a result of the project implementation energy consumption of the enterprise is reduced, which is related to greenhouse gases emissions, and the quantity of the beetroot pulp decreases, which would be moved to landfill, where as a result of anaerobic fermentation of the organic matter contained in the beetroot pulp methane would be released, which is a greenhouse gas.

The project is implemented at LLC “TH “Shepetivsky Sugar” which is located in Khmelnitsk region of Ukraine. The project activity includes to parts:

1. Implementation of the energy efficiency measures to reduce consumption of electricity and natural gas;
2. Advancement of the waste utilization practices.

Reductions in specific consumption of natural gas and electricity are achieved as a result of replacement of filtering equipment, installation of frequency converters, introduction of new burners for gas-fired boilers, replacement of centrifuges and partial automatization of the process.

Beetroot pulp is a side product of sugar production and is a desugarizated chips of sugar-beet. This product has valuable fodder qualities and can be used for feeding cattle, which actively consumes beetroot pulp of any type: fresh, good soured, ensilage or dry. Technological process of the

sugar plant leads to occurrence of fresh beetroot pulp with humidity 91% and more. High content of organic matter and water makes it an excellent environment for intensive growth of microorganisms, which is the reason for its fast spoilage (during 24 hours after it is produced), which is why it cannot be used for forage and has to be moved to landfill as an organic waste. Reducing water content of beetroot pulp to 80% already makes it siloable (siloing is beetroot pulp conservation through creating conditions for lactate fermentation). Storage time of ensilage if kept with no contact with oxygen extends to a year or more. By additional pressing out of the beetroot pulp, the enterprises widen their options for its useful utilization, which increases demand for it that finally leads to reduction of the spoiled beetroot pulp. The proposed project activity includes advanced squeezing of the beetroot pulp by introducing additional presses.

Situation before the project

Before implementation of the project the enterprise operated equipment with higher energy demand per unit of the produced sugar. It was operational and could be used further provided that regular maintenance activities are undertaken.
Before the beginning of the project necessary equipment for additional pressing of the beetroot pulp was not available, which was the reason why it quickly became spoiled and this valuable fodder resource turned to organic waste, which first were stored in the pulp pits (during three month), and then was moved to landfills. When pulp pits were emptied some about 3-5% of the spoiled beetroot pulp would remain, containing big quantity of microorganisms, which quickly contaminated the fresh beetroot pulp and accelerated its spoiling. Because of such practice the beetroot pulp could not be used for cattle feeding and was removed to landfills.

Baseline scenario
Baseline scenario is continuation of current practice: specific consumption of natural gas and electricity would remain at pre-project levels, and beetroot pulp would be stored as it was produced in pulp pits, with no additional efforts undertaken to reduce its water content. When pulp pit would be full, beetroot pulp would be removed to landfill. This scenario envisages decay of the organic matter with release of the landfill gas, which contains greenhouse gas methane. Baseline scenario requires no changes in the technological process of the plant, and therefore no big capital investments would have to be made, except for operational expenses, and does not faces any barriers.

Project scenario (technical summary)

In the project scenario replacement and modernisation of equipment takes place (replacement and upgrading of pumping equipment, replacement

burners, transformers, filtration stations, etc.), which leads to decrease in consumption of natural gas and electricity. Also, equipment to reduce water content of the beetroot pulp is introduced, this allows its useful utilization for cattle feeding, therefore it is not removed to landfill and methane is not released into the atmosphere.

History of the project

The project was initiated by LLC "TH "Shepetivsky Sugar" in the middle of 2003. It was started with the creation of the Working Group on Technical Modernization and Advancement of Waste Utilization Practices at LLC "TH "Shepetivsky Sugar" in November 2003.

Main activities were implemented during 2005-2011, that in 2005 started generating greenhouse gases emission reductions, quantity of which will gradually increase as components of the project activity are commissioned. Emissions reductions will be sold as ERUs in the international market of emissions reductions, and the funds obtained will improve the financial performance of the project to a level that justifies the means that were used for its implementation. From the very beginning, JI mechanism was one of the prominent factors of the project and financial benefits under this mechanism plays an important role in making the decision on the start of the operation and considered to be one of the reasons for beginning of the project realization.

The identified areas of concern as to the project description, project participants response and BVC's conclusion are described in Appendix A (refer to CAR 01-CAR 09).

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 23 Corrective Action Requests and 07 Clarification Requests.

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

4.1 Project approvals by Parties involved (19-20)

After receiving JI Project Determination Report from the Accredited Independent Entity the project documentation will be submitted to the State Environmental Investment Agency of Ukraine for receiving a Letter of Approval.

The identified areas of concern as to the project approvals by Parties involved, project participants' response and BVC's conclusion are described in Appendix A (refer to CAR 10 and CAR 11).

The project has no approvals by the Parties involved, therefore CAR 10 and 11 remain pending. These CARs will be closed after providing the written approvals.

4.2 Authorization of project participants by Parties involved (21)

The participation of each project participant will be authorized by the Letter of Approval from appropriate party explicitly stating the name of the legal entity.

The project has no approvals by the Parties involved, therefore CAR 10 and 11 remain pending. These CARs will be closed after providing the written approvals.

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:
For the subproject "Implementation of the energy efficiency measures to reduce consumption of electricity and natural gas":
   a. Continuation of the current situation which does not require any investment;
   b. Continuation of the current situation which requires expenses in order to maintain working condition of the equipment;
   c. Partial realization of energy efficiency program, financed by the project owner;
   d. Implementation of the project activity, financed by the third party;

e. Implementation of the project activity not being registered as a JI project.

For the subproject "Advancement of the waste utilization practices":

a. Continuation of the current situation which does not require any investment;
b. Utilization of beetroot pulp to produce biogas;
c. Processing of beetroot pulp for utilization for cattle feeding;
d. Production of beetroot pectin, pectin gum or food fibers from beetroot pulp.

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power 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. Complex production process
b. Prices fluctuation on electricity and natural gas in Ukraine
c. Long pay-off period
d. The implementation of the proposed project requires sufficient investment and personnel
e. Ukraine has one of the lowest tariffs in Europe. Due to this it is hard to invest funds in the reconstruction and repair of equipment
f. In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors. All parameters and data are either monitored by the project participants or are taken from sources that provide a verifiable reference for each parameter. Project participants use approaches suggested by the Guidance and the methodological Tools approved by the CDM Executive Board
g. In such a way that emission reduction units (ERUs) cannot be earned for decreases in activity levels outside the project activity or due to force majeure. According to the proposed approach emission reductions will be earned only when project activity will generate refined oil products, so no emission reductions can be earned due to any changes outside the project activity
h. Taking account of uncertainties and using conservative assumptions. A number of steps have been taken in order to account for uncertainties and safeguard conservativeness:
    a. If possible, the same approach for calculating the level of baseline and project emissions as specified in the National inventories of anthropogenic emissions by

sources and removals by sinks of greenhouse gases in the Ukraine are used;

b. Lower range of parameters is used for calculation of baseline emissions and higher range of parameters is used for calculation of project activity emissions;
c. To reduce uncertainty and ensure conservativeness of emission calculations default values were used to the extent possible.

Detailed description of baseline emissions calculation, employed calculation formulae and emission factors are provided in the Annex 2 “Baseline information” of the PDD.

In order to establish the baseline scenario project participants have chosen the use of JI specific approach and “Combined tool to identify the baseline scenario and demonstrate additionality” (version 04.0.0).

All explanations, descriptions and analyses pertaining to the baseline in the PDD are made in accordance with the identified JI specific approach and the baseline is identified appropriately.

The identified areas of concern as to the baseline setting, project participants response and BVC’s conclusion are described in Appendix A (refer to CAR 12).

4.4 Additionality (27-31)

The barrier and common practice analyses were used for the demonstration of additionality. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The additionality was justified by:

1. Identification of alternatives to the project activity;
2. The identified financial and other barriers may hinder the planned project activity implementation without it being registered as JI project;
3. Common practice analysis that complements the barrier analysis

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 BVC’s conclusion are described in Appendix A (refer to CAR 13).

4.5 Project boundary (32-33)

The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

(i) Under the control of the project participants:
- CO_2 emissions due to natural gas combustion;
- CO_2 emissions due to electricity consumption;
- CH_4 emissions due to organic waste decay at landfill (beetroot pulp).

(ii) Reasonably attributable to the project:
- CO_2 emissions due to natural gas combustion;
- CO_2 emissions due to electricity consumption;
- CH_4 emissions due to organic waste decay at landfill (beetroot pulp).

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

The AIE determined the project boundary by:
a) Detailed analysis of the documentation (the list of all reviewed documentation is provided in the Category 2 Documents below).
b) Interviews and observations during the site visit to the LLC "TH "Shepetivsky Sugar" dated 27/07/2012 (The list of persons interviewed is provided in the Persons Interviewed Table below).

Based on the above assessment, the AIE hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity.

The identified areas of concern as to the project boundary, project participants response and BVC's conclusion are described in Appendix A (refer to CAR 14).

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the real action of the project began, and the starting date is 27/06/2003, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 25 years and 300 months.

The PDD states the length of the crediting period in years and months, which is 25 years, and its starting date as 01/01/2005, which is on the date the first emission reductions or enhancements of net removals are generated by the project.

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

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

The identified areas of concern as to the crediting period, project participants response and BVC's conclusion are described in Appendix A (refer to CL01 – CL 05, CAR 14 – CAR 15).

4.7 Monitoring plan (35-39)

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

The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. are clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions to be monitored.

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

The monitoring plan explicitly and clearly distinguishes:

(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination, such as $SEC_{NG,BL}$, $SEC_{EE,BL}$.

(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed

throughout the crediting period), but that are not already available at the stage of determination, such are not applicable.

(iii) Data and parameters that are monitored throughout the crediting period, such as baseline emissions.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording according to the type indicated in the key parameters tables in the Section B of the PDD.

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

Project emissions:
Calculation formula for identifying the amount of emissions after the project implementation:

$$PE_y = PE_{NG,y} + PE_{EE,y} + PE_{CH_4,y}, \quad \text{(Equation 1)}$$

where:

$PE_{NG,y}$ project CO_2 emissions due to natural gas combustion in the period y, tCO_2;

$PE_{EE,y}$ project CO_2 emissions due to electricity consumption in the period y, tCO_2;

$PE_{CH_4,y}$ project methane emissions due to organic waste decay at landfill for the period from the beginning of the project till the end of the period y, tCO_2e

y period of time for which methane emissions are calculated.

$$PE_{NG,y} = \frac{FC_{NG,PJ,y} \times NCV_{NG,y} \times EF_{NG}}{10^6} \quad \text{(Equation 2)}$$

where:

$FC_{NG,PJ,y}$ project natural gas consumption, th. m^3;

$NCV_{NG,y}$ net calorific value of natural gas, GJ/th. m^3;

EF_{NG} emission factor for natural gas combustion, $kgCO_2/TJ$ (2006 IPCC);

y period of time for which methane emissions are calculated;

10^6 dimensionless conversion factor, necessary for maintaining formula dimensions correspondence.

$$PE_{EE,y} = EC_{PJ,y} \times EF_{grid,y} \quad \text{(Equation 3)}$$

where:

$EC_{PJ,y}$ project electricity consumption, th. kWh;

$EF_{grid,y}$ emission factor for grid electricity consumption (Factor of specific indirect emissions of carbon dioxide for consumption of electricity by 2nd-class consumers), $kgCO_2/kWh$;

y period of time for which methane emissions are calculated.

Project methane emissions due to organic waste decay at landfill are calculated in the following way:

$$PE_{CH4,y} = \varphi \cdot (1-f) \cdot GWP_{CH4} \cdot (1-OX) \cdot {}^{16}/_{12} \cdot F \cdot DOC_f \cdot MCF \cdot \sum_{x=1}^{y} P_x \cdot DOC \cdot e^{-k \cdot (y-x)} \cdot (1-e^{-k}),$$

(Equation 4)

where:

$PE_{CH_4,y}$ project methane emissions due to organic waste decay at landfill for the period from the beginning of the project till the end of the period *y*, tCO_2e;

Px amount of sugar production organic waste, that was not sold and was transported to the disposal site in the period *x*, t;

φ correction factor to account for uncertainties, dimensionless. (Study on validation of landfill gas formation models);

f share of methane being captured and utilized at the disposal site, fraction;

GWP_{CH4} global warming potential for methane, tCO_2e/tCH_4 (In accordance with UNFCCC decision and Kyoto Protocol);

OX oxidation factor, which characterizes the fraction of methane oxidizing in the material that covers wastes, fraction (2006 IPCC);

F volume of methane in the landfill gas, fraction (2006 IPCC);

DOC_f fraction of carbon of organic origin, which can be decomposed, fraction (2006 IPCC);

MCF methane conversion factor, fraction (2006 IPCC);

DOC Weight fraction of organic origin carbon in the beetroot pulp, t C/ t beetroot pulp (2006 IPCC);

k Decomposition factor of wastes (beetroot pulp), fraction (2006 IPCC);

x period during the crediting period: $x \in (1; y)$;

y period of time for which methane emissions are calculated.

Baseline emissions:

The baseline emissions are calculated as follows:

$$BE_y = BE_{NG,y} + BE_{EE,y} + BE_{CH_4,y},$$

(Equation 5)

where:

$BE_{NG,y}$ baseline CO_2 emissions due to natural gas combustion in the period *y*, tCO_2;

$BE_{EE,y}$ baseline CO_2 emissions due to electricity consumption in the period *y*, tCO_2;

$BE_{CH_4,y}$ baseline methane emissions due to organic waste decay at landfill for the period from the beginning of the project till the end of the period *y*, tCO_2e.

y period of time for which emissions are calculated.

$$BE_{NG,y} = \frac{FC_{NG,BL,y} \times NCV_{NG,y} \times EF_{NG}}{10^6} \quad \text{(Equation 6)}$$

where:

$FC_{NG,BL,y}$ baseline natural gas consumption, th. m^3 (here and further in relation to natural gas – at standard conditions of temperature and pressure 20ºC and 101 325 Pa);

$NCV_{NG,y}$ net calorific value of natural gas, GJ/th. m^3;

EF_{NG} emission factor for natural gas combustion, kg CO_2/TJ (IPCC 2006);

y period of time for which emissions are calculated;

10^6 dimensionless conversion factor, necessary for maintaining formula dimensions correspondence.

Baseline natural gas consumption is a calculated value, which depends on specific baseline natural gas consumption and actual (project) sugar production, therefore:

$$FC_{NG,BL,y} = SEC_{NG,BL} \times P_{sugar,PJ,y} \quad \text{(Equation 7)}$$

where:

$SEC_{NG,BL}$ specific baseline natural gas consumption, th. m^3/t sugar;

$P_{sugar,PJ,y}$ sugar production, t;

y period of time for which methane emissions are calculated.

$$BE_{EE,y} = EC_{BL,y} \times EF_{grid,y} \quad \text{(Equation 8)}$$

where:

$EC_{BL,y}$ baseline electricity consumption, th. kWh;

$EF_{grid,y}$ emission factor for electricity consumption (emission factor for electricity consumed by the project activity in period y equal to the indirect specific carbon dioxide emissions from electricity consumption by the 2nd class electricity consumers), $kgCO_2$/kWh;

y period of time for which methane emissions are calculated.

Baseline electricity consumption is a calculated value, which depends on specific baseline electricity consumption and actual (project) sugar production, therefore:

$$EC_{BL,y} = SEC_{EE,BL} \times P_{sugar,PJ,y} \quad \text{(Equation 9)}$$

where:

$SEC_{EE,BL}$ specific baseline electricity consumption, th. kWh/t sugar;

$P_{sugar,PJ,y}$ project sugar production, t;

y period of time for which methane emissions are calculated.

Baseline methane emissions due to organic waste decay at landfill are calculated in the following way:

$$BE_{CH4,y} = \varphi \cdot (1-f) \cdot GWP_{CH4} \cdot (1-OX) \cdot {}^{16}/_{12} \cdot F \cdot DOC_f \cdot MCF \cdot \sum_{x=1}^{y} W_x \cdot DOC \cdot e^{-k \cdot (y-x)} \cdot (1-e^{-k}),$$

(Equation 10)

where:

$BE_{CH4,y}$ baseline methane emissions due to organic waste decay at landfill for the period from the beginning of the project till the end of the period *y*, tCO_2e

W_x amount of sugar production organic waste, that would be transported to the disposal site in the period *x*, t;

φ correction factor to account for uncertainties, dimensionless. (Study on validation of landfill gas formation models)

f share of methane being captured and utilized at the disposal site, fraction;

GWP_{CH4} global warming potential for methane, tCO_2e/tCH_4 (In accordance with UNFCCC decision and Kyoto Protocol);

OX oxidation factor, which characterizes the fraction of methane oxidizing in the material that covers wastes, fraction (2006 IPCC);

F volume of methane in the landfill gas, fraction (2006 IPCC);

DOC_f fraction of carbon of organic origin, which can be decomposed, fraction (2006 IPCC);

MCF methane conversion factor, fraction (2006 IPCC);

DOC Weight fraction of organic origin carbon in the beetroot pulp, t C/ t beetroot pulp (2006 IPCC);

k Decomposition factor of wastes (beetroot pulp), fraction (2006 IPCC);

x period during the crediting period: $x \in (1; y)$;

y period of time for which methane emissions are calculated.

Leakage

Leakages in the period *y* are calculated in the following way:

$LE_y = 0$, (Equation 11)

where

LE_y Leakages due to the project in the period y, tCO2e.

Emission Reductions:

Annual emission reductions are calculated as follows:

$ER_y = BE_y - LE_y - PE_y$ (Equation 12)

ER_y emission reductions following the project implementation in the period *y*, tCO_2e;

BE_y baseline emissions of the project in the period y, tCO_2e;

LE_y leakage as a result of implementation of the project in the period y, tCO_2e;

PE_y project emissions in the period y, tCO_2e;

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

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities.

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

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

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

The identified areas of concern as to the monitoring plan project participants response and BVC's conclusion are described in Appendix A (refer to CAR 11 – CAR 17).

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential indirect CO_2, CH_4, N_2O leakage in the process of fuel production and transportation and appropriately explains that sources can be neglected.

There are no outstanding issues concerning the leakage.

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 or enhancement of net removals generated by the project.

The PDD provides the ex ante estimates of:

(a) Emissions or net removals for the project scenario (within the project boundary), which are:

Estimated project emissions before the first crediting period:

	2005	**2006**	**2007**	**Total**
Project emissions due to natural gas combustion, t CO_2 eq	0	17 549	21 763	**39 312**
Project emissions due to electricity consumption, t CO_2 eq	6 408	7 130	8 980	**22 518**
Project methane emissions due to organic waste decay at landfill, t CO_2 eq	0	0	0	**0**
Project emissions before the first crediting period, t CO_2 eq	**6408**	**24679**	**30743**	**61 830**

Estimated project emissions during the first crediting period:

	2008	**2009**	**2010**	**2011**	**2012**	**Total**
Project emissions due to natural gas combustion, t CO_2 eq	16 404	12 103	18 378	14 130	15 254	**76 269**
Project emissions due to electricity consumption, t CO_2 eq	8 928	6 069	10 032	8 222	8 319	**41 570**
Project methane emissions due to organic waste decay at landfill, t CO_2 eq	0	0	0	0	0	**0**

Project emissions during the first crediting period, t CO_2 eq	**25332**	**18172**	**28410**	**22352**	**23573**	**117839**

Estimated project emissions after the end of the first crediting period (2013-2029):

Year	Project emissions due to organic waste decay at landfill, t CO_2 eq
2013	23 573
2014	23 573
2015	23 573
2016	23 573
2017	23 573
2018	23 573
2019	23 573
2020	23 573
2021	23 573
2022	23 573
2023	23 573
2024	23 573
2025	23 573
2026	23 573
2027	23 573
2028	23 573
2029	23 573
Estimated project emissions after the end of the first crediting period (2013-2029)	**400 741**

(b) Leakage, as applicable, which are:

Estimated leakages before the first crediting period:

	2005	2006	2007	Total
Estimated leakages before the first crediting period, t CO_2 eq	**0**	**0**	**0**	**0**

Estimated leakages during the first crediting period:

	2008	2009	2010	2011	2012	Total
Estimated leakages during the first crediting period, t CO_2 eq	**0**	**0**	**0**	**0**	**0**	**0**

Estimated leakages after the end of the first crediting period (2013-2029):

Year	Leakages
2013	0
2014	0
2015	0
2016	0
2017	0
2018	0
2019	0
2020	0
2021	0
2022	0
2023	0
2024	0
2025	0
2026	0
2027	0
2028	0
2029	0
Estimated leakages after the end of the first crediting period, t CO_2 eq	**0**

(c) Emissions for the baseline scenario (within the project boundary), which are:

Estimated baseline emissions before the first crediting period:

	2005	**2006**	**2007**	**Total**
Baseline emissions due to natural gas combustion, t CO_2 eq	0	40 090	48 310	**88 400**
Baseline emissions due to electricity consumption, t CO_2 eq	11 092	13 922	16 776	**41 790**
Baseline methane emissions due to organic waste decay at landfill, t CO_2 eq	0	0	162 773	**162 773**
Estimated baseline emissions before the first crediting period, t CO_2 eq	**11092**	**54012**	**227859**	**292963**

Estimated baseline emissions during the first crediting period:

	2008	2009	2010	2011	2012	Total
Baseline emissions due to natural gas combustion, t CO_2 eq	42 414	35 153	45 696	43 571	41 708	**208 542**
Baseline emissions due to electricity consumption, t CO_2 eq	20 122	16 923	21 785	20 806	19 917	**99 553**
Baseline methane emissions due to organic waste decay at landfill, t CO_2 eq	196 848	205 649	231 796	243 106	255 785	**1 133 184**
Total baseline emissions during the first crediting period, t CO_2 eq	**259384**	**257725**	**299277**	**307483**	**317410**	**1441279**

Estimated baseline emissions after the end of the first crediting period (2013-2029):

Year	Baseline emissions due to organic waste decay at landfill, t CO_2 eq
2013	327 948
2014	336 705
2015	343 984
2016	350 033
2017	355 061
2018	359 240
2019	362 712
2020	365 599
2021	367 997
2022	369 991
2023	371 648
2024	373 025
2025	374 169
2026	375 121
2027	375 911
2028	376 568
2029	377 114
Estimated baseline emissions after the end of the first crediting period (2013-2029)	**6 162 826**

(d) Emission reductions or enhancements of net removals adjusted by leakage (based on (a)-(c) above), which are:

Emission reductions before the first crediting period:

	2005	2006	2007	Всього
Emission reductions before the first crediting period, t CO_2 eq	**4 684**	**29 333**	**197 116**	**231 133**

Emission reductions before the first crediting period:

	2008	2009	2010	2011	2012	Всього
Emission reductions during the first crediting period, t CO_2 eq	**234 052**	**239 553**	**270 867**	**285 131**	**293 837**	**1 323 440**

Emission reductions after the first crediting period (2013-2029):

Year	Emission reductions due to organic waste decay at landfill after the first crediting period, t CO_2 eq
2013	304 375
2014	313 132
2015	320 411
2016	326 460
2017	331 488
2018	335 667
2019	339 139
2020	342 026
2021	344 424
2022	346 418
2023	348 075
2024	349 452
2025	350 596
2026	351 548
2027	352 338
2028	352 995
2029	353 541
Estimated emission reductions after the first crediting period (2013-2029)	**5 762 085**

The estimates referred to above are given:

(a) On a periodical basis;

(b) From 01/01/2008 to 31/12/2029, covering the whole crediting period;

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

(d) For each GHG gas, 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 formulas used for calculating the estimates referred above are consistent throughout the PDD.

For calculating the estimates referred to above, key factors, 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 are clearly identified, reliable and transparent.

Emission factors were selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

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

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions 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.

The PDD includes an illustrative ex ante emissions calculation.

No outstanding issues were raised concerning the emission reductions assessment.

4.10 Environmental impacts (48)

According to the legislation of Ukraine, a detailed EIA for this project is not needed.

Implementation of the project activity also has a positive social impact through removing of the concentrated odour beetroot pulp storage facilities and improving working conditions at the sugar plant.

Since the project does not lead to negative impacts on the environment, transboundary impacts that occur in any other country, and are caused by implementation of this project, which is physically located entirely within Ukraine, are absent.

No outstanding issues were raised concerning the environment impact.

4.11 Stakeholder consultation (49)

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

4.12 Determination regarding small scale projects (50-57)

Not applicable

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

Not applicable

4.14 Determination regarding programmes of activities (65-73)

Not applicable

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

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

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the "Implementation of technological modernization of LLC "TH "Shepetivsky Sugar" Project in Shepetivka town of Khmelnitsk region, Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

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

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

The determination revealed one pending issue related to the current determination stage of the project: the issue of the written approval of the project and the authorization of the project participant by the host Party. If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 3.0 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 3.0) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

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

7 REFERENCES

Category 1 Documents:
Documents provided by «MT-Invest Carbon» LLCthat relate directly to the GHG components of the project.

/1/ Project Design Document “Implementation of technological modernization of LLC “TH “Shepetivsky Sugar” version 1.0 dated 20/07/2012
/2/ Project Design Document “Implementation of technological modernization of LLC “TH “Shepetivsky Sugar” version 2.0 dated 21/09/2012
/3/ Project Design Document “Implementation of technological modernization of LLC “TH “Shepetivsky Sugar” version 3.0 dated 29/10/2012
/4/ GHG emission reductions calculation spreadsheet “20120727_Shepetovka_ER.xls”
/5/ Letter of Endorsement №2679/23/7 JI project “Implementation of technological modernization of LLC “TH “Shepetivsky Sugar” issued by the State Environmental Investment Agency dated 20/09/2012

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

/1/ Photo–Upgraded sulfited syrup filtration station
/2/ Photo–replaced pumps of I product high-wash syrup
/3/ Photo–upgraded I saturation juice suspension filtration station
/4/ Photo–replaced pumps of I product greens
/5/ Photo–Automatic machine for II and III products glucose syrup mixture boiling
/6/ Photo–Beet pulp deep extraction press
/7/ Photo–Beet pulp press Babbini, fabrication # P18AH
/8/ Photo–installed spray-niche burners
/9/ Photo– gas meter, serial # 2239183
/10/ Photo–gas volume meter Universal-01, serial # 7459
/11/ Certificate on implementation of quality management system as per ISO 9001:2008, DSTU ISO 9001:2009 standards, issued by the Global Certific LLC Quality Management System Entity
/12/ Certificate # 01.118.713, valid till 02/11/2013 on implementation of quality management system as per EN ISO 9001:2008 standard, issued by the Quality Management System Entity № 3053
/13/ Attestation certificate # 07-2010 dated 29/07/2010, valid till 26/07/2014, on Shepetivka Tsukor Trade House LLC, issued by

Kharchopromavtomatyka Plus Scientific, Research and Design Institute LLC

/14/ Logbook Ж-8.2.4-04 on processed beet pulp accounting

/15/ Passport on power meter type ET2A5E7ULTR, fabrication # 42294 (last calibration date–20/10/2010)

/16/ Passport on power meter type ET2A5E7ULTR, fabrication # 37863 (last calibration date–27/01/2009)

/17/ Passport on power meter type ET2A5E7ULTR, fabrication # 42295 (last calibration date–29/10/2010)

/18/ Statement dated 18/02/2009 on replacement of power meter type САЗУ-И670, fabrication # 616123 by power meter type ET2A5E7ULTR, fabrication # 37863

/19/ Statement dated 18/02/2009 on replacement of power meter type СР4У-И672М, fabrication # 711969 by power meter type ET2A5E7ULTR, fabrication # 37863

/20/ Statement # 30 dated 05/10/2011 on seal preservation, oil circuit breaker ТП # 476, line # 06 10 kV

/21/ Statement dated 18/02/2009 on replacement, check, power energy acceptance of power meters type САЗУ-И670, fabrication # 616123, type СР4У-И672М, fabrication # 711969 by power meter type ET2A5E7ULTR, fabrication # 37863

/22/ Statement dated 25/11/2010 on replacement, check, power energy acceptance of power meter type ET3A5E7GLMT, fabrication # 8807 by power meter type ET2A5E7ULTR, fabrication # 42294, power meter type ET3A5E7GLMT, fabrication # 11796 by power meter type ET2A5E7ULTR, fabrication # 42295

/23/ Statement dated 12/12/2008 on installation of active power meter type САЗУ-Н670Д, fabrication # 616123 (calibrated in 2008), reactive power meter type СР4У-Н673М, fabrication # 711969 (calibrated in 2007)

/24/ Statement dated 15/06/2005 on replacement of power meters type СРЗУ-И670М, fabrication # 904899, type СРЗУИТР-09, fabrication # 020339 by power meter type Елвін, fabrication # 8807

/25/ Statement # 30 dated 05/10/2011 on back-up self-supporting power station # ТП-476, line # 06 10 kV

/26/ Passport on temperature transducer ПВТ-01-1-тип 1-100-6, fabrication # 9162 (last calibration date–06/07/2011)

/27/ Passport on gas volume meter Універсал-01, fabrication # 7459 (last calibration date–24/07/2008)

/28/ Passport on standard orifice, fabrication # 223896 (last calibration date–08/07/2011)

/29/ Passport on pressure sensor type Мида ДА-13П-01Ех, fabrication # 04209100 (last calibration date–07/07/2010)

/30/ Passport on pressure difference sensor type CD2A, fabrication # 2239183 (last calibration date–22/08/2011)

/31/ Passport on pressure difference sensor type CD1A, fabrication # 2239182 (last calibration date–22/08/2011)

/32/ Accounting protocol dated 25/08/2011 on pressure sensor # 224989
/33/ Passport on orifice, fabrication # 223896 (last calibration date–25/08/2004)
/34/ Accounting protocol dated 14/07/1998 on pressure sensor # 223895
/35/ Accounting protocol dated 13/07/1998 on pressure sensor # 223896
/36/ Passport on resistance temperature device type ТСП 1187 100П, fabrication # 37 (last calibration date–11/08/2011)
/37/ Passport on resistance temperature device type ТСП 1187 100П, fabrication # 1278 (last calibration date–11/08/2011)
/38/ Passport on manometer type Сапфир 22 ДД, fabrication # 981453 (last calibration date–11/08/2011)
/39/ Passport on manometer type Сапфир 22 ДД, fabrication # 981447 (last calibration date–11/08/2011)
/40/ Passport on resistance temperature device type ТСП 1187 50П, fabrication # w/n (last calibration date–11/08/2011)
/41/ Passport on resistance temperature device type ТСП 1187 50П, fabrication # w/n (last calibration date–11/08/2011)
/42/ Passport on manometer type Сапфир 22 ДИ, fabrication # 961462 (last calibration date–11/08/2011)
/43/ Passport on manometer type Сапфир 22 ДИ, fabrication # 981468 (last calibration date–11/08/2011)
/44/ Passport on manometer type Сапфир 22 ДД, fabrication # 981449 (last calibration date–11/08/2011)
/45/ Passport on manometer type Сапфир 22 ДД, fabrication # 981457 (last calibration date–11/08/2011)
/46/ Passport on pressure sensor type Сапфир 22 ДИ 2160, fabrication # 837435 (last calibration date–25/08/2010)
/47/ Passport on pressure sensor type Сапфир 22 ДИ 2160, fabrication # 837440 (last calibration date–25/08/2010)
/48/ Passport on pressure sensor type Сапфир 22 ДИ 2160, fabrication # 837415 (last calibration date–25/08/2010)
/49/ Passport on pressure sensor type Сапфир 22 ДИ 2160, fabrication # 837430 (last calibration date–25/08/2010)
/50/ Passport on pressure sensor type Сапфир 22 ДИ 2160, fabrication # 911132 (last calibration date–25/08/2010)
/51/ Passport on pressure sensor type Метран-100-ДИ 1111, fabrication # 815428 (last calibration date–25/08/2010)
/52/ Passport on pressure transmitter type ТСП-1288, fabrication # 289 (last calibration date–25/08/2010)
/53/ Passport on pressure transmitter type ТСП-1288, fabrication # 288 (last calibration date–25/08/2010)
/54/ Passport on pressure transmitter type Сапфір-22 ДДВн 2440, fabrication # 948540 (last calibration date–25/08/2010)
/55/ Passport on pressure transmitter type Сапфір-22 ДД 2440,

fabrication # 911543 (last calibration date–25/08/2010)
/56/ Passport on pressure transmitter type Сапфір-22 ДД 2440, fabrication # 911548 (last calibration date–25/08/2010)
/57/ Passport on pressure transmitter type Сапфір-22 ДД 2420, fabrication # 948441 (last calibration date–25/08/2010)
/58/ Passport on pressure transmitter type Сапфір-22 ДД 2420, fabrication # 948449 (last calibration date–25/08/2010)
/59/ Information note on production for 2011, Shepetivka Tsukor Trade House LLC
/60/ Information note on production for 2010, Shepetivka Tsukor Trade House PJSC
/61/ Information note on production for 2009, Shepetivka Tsukor Trade House OJSC
/62/ Information note on production for 2008
/63/ Information note on production for 2007
/64/ Information note on production for 2006
/65/ Information note on production for 2005
/66/ Form # 24-power engineering. Power balance, power equipment structure and report on power station (power generating unit) operation for 2006
/67/ Form # 24-power engineering. Power balance, power equipment structure and report on power station (power generating unit) operation for 2007
/68/ Form # 24-power engineering. Power balance, power equipment structure and report on power station (power generating unit) operation for 2008
/69/ Form # 24-power engineering. Power balance, power equipment structure and report on power station (power generating unit) operation for 2009
/70/ Form # 24-power engineering. Power balance, power equipment structure and report on power station (power generating unit) operation for 2009
/71/ Form # 24-power engineering. Power balance, power equipment structure and report on power station (power generating unit) operation for 2010
/72/ Form # 24-power engineering. Power balance, power equipment structure and report on power station (power generating unit) operation for 2011
/73/ Form # 11- МТП. Report on fuel, heat and electricity consumption for 2007
/74/ Form # 11- МТП. Report on fuel, heat and electricity consumption for 2011
/75/ Form # 11- МТП. Report on fuel, heat and electricity consumption for 2010
/76/ Form # 11- МТП. Report on fuel, heat and electricity consumption for 2009
/77/ Form # 11- МТП. Report on fuel, heat and electricity consumption

for 2008
/78/ Form # 11- МТП. Report on fuel, heat and electricity consumption for 2006
/79/ Form # 11- МТП. Report on fuel, heat and electricity consumption for 2005
/80/ Order # 147 dated 27/06/2003 on appointment of working team responsible for enterprise technical rehabilitation and production organic wastes utilization improvement
/81/ Inventory voucher # 115 dated 14/04/2005 (plate-type filter)
/82/ Formal request # 120 dated 15/04/2005 (МВЖ-70 filter)
/83/ Goods delivery note # РН-0000611 dated 30/03/2005 (МВЖ-70 plate-type filter)
/84/ Formal request dated 28/04/2005 (ЭЦВ-8 deep well pump)
/85/ Inventory voucher # 176 dated 28/04/2005 (ЕЦВ 6-6,3-125 pump)
/86/ Invoice # 33 dated 28/04/2005 (ЕЦВ 6-6,3-125 pump, fabrication # 357)
/87/ Acceptance-transmitting statement # 1/1 dated 28/04/2005 on ЕЦВ 6 pump
/88/ Acceptance-transmitting statement # 119 dated 29/12/2006 (press-filter КФ-1000)
/89/ Inventory voucher # 1262 dated 08/10/2007 (frequency transmitter)
/90/ Goods delivery note # 10 dated 28/09/2007 (frequency transmitter 160/200 kW)
/91/ Invoice-proforma # 10 dated 20/09/2007 (frequency transmitter 160/200 kW)
/92/ Acceptance-transmitting statement # 61 dated 31/12/2007 (deep extraction press Babbini P-18)
/93/ Acceptance-transmitting statement # 62 dated 31/12/2007 (deep extraction press Babbini P-18)
/94/ Inventory voucher # 1319 dated 12/11/2007 (transporter)
/95/ Goods delivery note # РН-0000001 dated 12/11/2007 (transporter)
/96/ Invoice-proforma # СФ-0000001 dated 09/11/2007 (transporter)
/97/ Statement № 1 on acceptance of contractor's work for May 2007
/98/ Statement dated 26/06/2007 on acceptance of contractor's work for June 2007
/99/ Inventory voucher # 111 dated 22/03/2007 (filters for syrup)
/100/ Invoice # 29 dated 28/02/2007 (filters for syrup)
/101/ Goods delivery note # 196 dated 26/12/2006 (filters for syrup)
/102/ Order # 90/2 dated 19/05/2011 on appointment of inventory commission
/103/ Formal request # 515/2 dated 20/05/2011 (СВН 80/32 pump)
/104/ Acceptance-transmitting statement # 62 dated 25/05/2011 (СВН 80/32 pump)
/105/ Inventory voucher # 292 dated 11/05/2011 (СВН 80/32 pump, СВН 125/32 pump)
/106/ Invoice # 5 dated 11/05/2011 (СВН 80/32 pump, СВН 125/32 pump)

/107/ Order # 98 dated 30/06/2011 on appointment of inventory commission
/108/ Formal request # 445 dated 30/06/2011 (CBH 80/32 pump)
/109/ Acceptance-transmitting statement 30/06/2011 (CBH 80/32 pump)
/110/ Invoice # 167/2 dated 19/11/2009 on commissioning of main production equipment
/111/ Formal request # 91 dated 03/11/2009 (return water drum control valve)
/112/ Acceptance-transmitting statement 19/11/2009 (return water drum control valve 200/630)
/113/ Inventory voucher # 975 dated 30/10/2009 (return water drum control valve 200/630)
/114/ Goods delivery note # PH-00030.1 dated 30/10/2009 (return water drum control valve 200/630)
/115/ Statement # 2 dated 05/10/2009 on executed works
/116/ Inventory voucher # 1562 dated 04/12/2008 (frequency transmitter 55 kW, 0,07/150A network metering valve, TRONIC cable)
/117/ Statement dated 26/03/2009 on executed works
/118/ Statement # 1 on executed works in March 2009
/119/ Inventory voucher # 371 dated 22/06/2009 (ШВВП 3*2,5, transformer Т-0,66-2 1500/5)
/120/ Invoice # 05/09 dated 22/06/2009 (ШВВП 3*2,5, transformer Т-0,66-2 1500/5)
/121/ Statement # 1 on executed works in September 2009
/122/ Statement # 2 on executed works in November 2009
/123/ Statement # 1 on executed project works in August 2010
/124/ Statement # 3 on executed works in June 2010
/125/ Inquiry dated 15/10/2010 on executed construction works cost for October 2010
/126/ Statement # 1 dated 15/10/2010 on executed construction works in October 2010
/127/ Inquiry dated 04/10/2010 on executed construction works cost for November 2010
/128/ Acceptance statement dated 04/10/2010 on executed construction works in November 2010
/129/ Statement # 3 on executed commissioning works in November 2010
/130/ Inquiry dated 03/12/2010 on executed construction works cost for December 2010
/131/ Order # 82 dated 22/06/2009 on commissioning of main production equipment
/132/ Acceptance-transmitting statement # 332/370 dated 22/06/2009 (reactive energy compensation unit УК 05-0,4-250 УЗ “Делiс”)
/133/ Formal request # 332 dated 22/06/2009 (reactive energy compensation unit УК 05-0,4-250 УЗ “Делiс”)
/134/ Inventory voucher # 370 dated 22/06/2009 (reactive energy compensation unit УК 05-0,4-250 УЗ “Делiс”)

/135/ Invoice # 04/09 dated 22/06/2009 (reactive energy compensation unit УК 05-0,4-250 УЗ “Делiс”)
/136/ Inventory voucher # 1051 dated 08/08/2008 (gas burner МДГГ-1000п for boiler ТС-25)
/137/ Goods delivery note # Л-803 dated 08/08/2008 (gas burner МДГГ-1000п for boiler ТС-25)
/138/ Formal request # 480 dated 08/08/2008 (gas burner МДГГ-1000п for boiler ТС-25)
/139/ Acceptance-transmitting statement # 480 dated 08/08/2008 (gas burner МДГГ-1000п for boiler ТС-25)
/140/ Order # 115 dated 08/08/2008 on commissioning of main production equipment
/141/ Inventory voucher # 522 dated 02/06/2010 (СКО 200/45 pumps, СКО 150/45 pumps)
/142/ Goods delivery note # 155 dated 02/06/2010 (СКО 200/45 pumps, СКО 150/45 pumps)
/143/ Order # 268/2 dated 16/07/2010 on commissioning of main production equipment
/144/ Acceptance-transmitting statement # 302 dated 16/07/2010 (СКО 200/45 pumps)
/145/ Acceptance-transmitting statement # 301 dated 16/07/2010 (СКО 150/45 pumps)
/146/ Formal request # 302 dated 16/07/2010 (СКО 200/45 pumps)
/147/ Formal request # 301 dated 16/07/2010 (СКО 150/45 pumps)
/148/ Inventory voucher # 877 dated 16/07/2010 (ПРУД Ду 100, ПРУД Ду 150, ПРУД Ду 200 valves)
/149/ Invoice # 24 dated 16/07/2010 (ПРУД Ду 100, ПРУД Ду 150, ПРУД Ду 200 valves)
/150/ Inventory voucher # 1038 dated 11/08/2010 (ПРУД Ду 100, ПРУД Ду 150, ПРУД Ду 200 valves)
/151/ Goods delivery note # СФ-0000044 dated 11/08/2010 (ПРУД Ду 100, ПРУД Ду 150, ПРУД Ду 200 valves)
/152/ Inventory voucher # 1036 dated 10/08/2010 (control panel with controller and drive remote control)
/153/ Inventory voucher # 1037 dated 10/08/2010 (MAG-3100 flow meter with MAG 5000 DN-50 transmitter)
/154/ Goods delivery note # СФ-0000043 dated 10/08/2010 (MAG-3100 flow meter with MAG 5000 DN-50 transmitter)
/155/ Acceptance statement # 1 dated 07/09/2010 on commissioning
/156/ Acceptance statement # 1 dated 11/05/2010 on executed construction works in May 2010
/157/ Acceptance statement # 2 dated 28/05/2010 on executed construction works in May 2010
/158/ Acceptance statement # 3 dated 29/06/2010 on executed construction works in June 2010
/159/ Order # 250/1 dated 16/06/2010 on commissioning of main production equipment

/160/ Acceptance-transmitting statement # 1-06 dated 16/06/2010 (МВЖ filters)
/161/ Formal request # 1-06 dated 16/06/2010 (МВЖ filters)
/162/ Inventory voucher # 266 dated 29/03/2010 (МВЖ-70 plate-type filter)
/163/ Goods delivery note # РН-515 dated 29/03/2010 (МВЖ-70 plate-type filter)
/164/ Order # 98 dated 30/06/2011 on commissioning of main production equipment
/165/ Formal request # 445 dated 30/06/2011 (СВН 80/32 pump)
/166/ Acceptance-transmitting statement # Ш0000000031 dated 30/06/2011 (СВН 80/32 pump)
/167/ Order # 90/2 dated 19/05/2011 on commissioning of main production equipment
/168/ Formal request # 515/2 dated 10/05/2011 (СВН 80/32 pump)
/169/ Acceptance-transmitting statement # Ш0000000023 dated 23/05/2011 (СВН 80/32 pump)
/170/ Order # 268/2 dated 16/07/2010 on commissioning of main production equipment
/171/ Acceptance-transmitting statement # 303 dated 16.07.2010 (СВН 50/32 pumps)
/172/ Inventory voucher # 466 dated 28/05/2010 (СВН 50/32 pump)
/173/ Goods delivery note # МГ-32 dated 20/04/2010 (СВН 50/32 pump)
/174/ Inventory voucher # 983 dated 28/07/2010 (МДГГ-1000М gas burner)
/175/ Goods delivery note # 26 dated 28/07/2010 (МДГГ-1000М gas burner)
/176/ Acceptance-transmitting statement # 1 dated 27.08.2010
/177/ Acceptance-transmitting statement # 2 dated 27.08.2010
/178/ Acceptance-transmitting statement dated 16.12.2010 on executed works
/179/ Acceptance-transmitting statement # 2023/1-2 dated 30.12.2010
/180/ Order # 22 dated 24/02/2011 on commissioning of main production equipment
/181/ Formal request # 35 dated 24/02/2011 (sugar purifying centrifuge, # 1300)
/182/ Acceptance-transmitting statement # 1/2 dated 24.02.2011 (pulp press, # 073366)
/183/ Form МД-3. Customs office declaration on sugar purifying drum spare details
/184/ Invoice # 23854 dated 11/05/2011 on spare details
/185/ Goods delivery note # РН-0000022 dated 05/07/2011
/186/ Inventory voucher # 811 dated 05/07/2011
/187/ Inventory voucher # 810 dated 05/07/2011
/188/ Goods delivery note # РН-0000044 dated 22/09/2011
/189/ Inventory voucher # 1145 dated 22/09/2011
/190/ Acceptance-transmitting statement # 3 dated 01.09.2011

/191/ Acceptance-transmitting statement # 2 dated 19.08.2011
/192/ Inventory voucher # 1458 dated 16/09/2010 (sugar purifying centrifuge, # 1300)
/193/ Form МД-2. Customs office declaration on sugar purifying centrifuge
/194/ Invoice # 090310-LD-1 dated 09/03/2010 on System of 4 used BW1300 BUCKAU-WOLF Automatic Batch Type Sugar Centrifuges

Persons interviewed:

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

/1/ Yevhen Bilym - Director
/2/ Oleksandr Andrushchak – Chief engineer
/3/ Tetiana Yakobchuk – Chief technician
/4/ Iryna Fedorova – Deputy chief technician
/5/ Yurii Hudzik – Deputy director on health and safety

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APPENDIX A: DETERMINATION PROTOCOL

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
General description of the project				
Title of the project				
-	Is the title of the project presented?	Implementation of technological modernization of LLC "TH "Shepetivsky Sugar"	OK	OK
-	Is the sectoral scope to which the project pertains presented?	3. Energy demand. 13. Waste handling and disposal.	OK	OK
-	Is the current version number of the document presented?	PDD version 3.0	OK	OK
-	Is the date when the document was completed presented?	Date of completion: 29/10/2012	OK	OK
Description of the project				
-	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description)?	Corrective Action Request 01 Please add brief description of the baseline scenario. Corrective Action Request 02 Please add technical summery of the project scenario. Corrective Action Request 03 Please use in the PDD the font prescribed by the JI PDD Form, version 01.	CAR 01 CAR 02 CAR 03	OK
-	Is the history of the project (incl. its JI component) briefly summarized?	Corrective Action Request 04 Please specify the starting date of the project and provide the justifying document to the AIE.	CAR 04	OK
Project participants				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Are project participants and Party(ies) involved in the project listed?	The list of the parties involved and project participants is provided in the tabular format in Section A.3 of the PDD. Parties involved: Ukraine (Host country). The second Party involved will be defined later. Corrective Action Request 05 The Table A.3 of the PDD has to comply with the format envisaged by the Guidelines for Users of the JI PDD Form, version 04.	CAR 05	OK
-	Is the data of the project participants presented in tabular format?	Yes, the data of the project participants is presented in tabular format.	OK	OK
-	Is contact information provided in Annex 1 of the PDD?	Yes, the contact information is provided in Annex 1 of the PDD. Corrective Action Request 06 Old information concerning KVED types of economic activities is presented in Annex 1. Please update the information as per valid certificate.	CAR 06	OK
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Yes.	OK	OK
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine	OK	OK
-	Region/State/Province etc.	Khmelnitsk region	OK	OK
-	City/Town/Community etc.	Shepetivka town	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	The geographic coordinates of the site are: N 50°11'00" E 27°04'00". Corrective Action Request 07 The Section A.4.1 has to comply with the format envisaged by the Guidelines for Users of the JI PDD Form, version 04.	CAR 07	OK
Technologies to be employed, or measures, operations or actions to be implemented by the project				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	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?	The summary of activities to be implemented within the project boundary is listed in the section A.4.2 of the PDD.	OK	OK
Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
-	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	Yes, it is stated in the PDD how anthropogenic GHG emission reductions are to be achieved by the proposed project.	OK	OK
-	Is it provided the estimation of emission reductions over the crediting period?	Corrective Action Request 08 Please provide the reference on the relevant Excel spreadsheet with calculations.	CAR 08	OK
-	Is it provided the estimated annual reduction for the chosen credit period in tCO_2e?	Yes, the estimated annual reduction for the proposed crediting period is provided in tCO_2e. Corrective Action Request 09 Please provide in the Section A.4.3.1 the total amount of emission reductions estimated for the crediting period.	CAR 09	OK
-	Are the data from questions above presented in tabular format?	Yes.	OK	OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	Yes, the duration of the crediting period is 20 years.	OK	OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	Yes, the estimates of total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent are provided in section A.4.3.1 of the PDD.	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as “Parties involved” in the PDD provided written project approvals?	Corrective Action Request 10 The names of the DFP (of the Parties involved) authorizing the project have to be indicated in the Section A.5.	CAR 10	Pending

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
19	Does the PDD identify at least the host Party as a "Party involved"?	Yes, Ukraine is the host Party.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	Corrective Action Request 11 There are no Letters of Approval from the Parties involved.	CAR 11	Pending
20	Are all the written project approvals by Parties involved unconditional?	Refer to CAR 11 above.	OK	OK
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: − A written project approval by a Party involved, explicitly indicating the name of the legal entity? or − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	Refer to CAR 11 above.	OK	OK
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 PDD describes the JI specific approach which is used for setting the baseline. Corrective Action Request 12 The PDD doesn't explicitly state the approach chosen for setting the baseline. Please correct.	CAR 12	OK
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	Yes, the PDD provides a detailed theoretical description of the project in a complete and transparent manner.	OK	OK
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future	The PDD provides justification that the baseline is established by listing and describing plausible future scenarios on the basis of conservative assumptions and	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure? (f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?	selecting the most plausible one.		
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?	"Combined tool to identify the baseline scenario and demonstrate additionality" (version 04.0.0) was used for baseline setting and demonstration of additionality. *Guidelines for objective demonstration and assessment of barriers* (version 01) were also taken into account.	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	Not applicable	N/A	N/A
Approved CDM methodology approach only				
26 (a)	Does the PDD provide the title, reference number and version of the approved CDM	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	methodology used?			
26 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	Not applicable	N/A	N/A
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
26 (c)	Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	Not applicable	N/A	N/A
26 (d)	Is the baseline identified appropriately as a result?	Not applicable	N/A	N/A
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	The Section B.1 of the PDD provides the analysis of the project additionality showing that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions. The analysis was performed based on the "Combined tool to identify the baseline scenario and demonstrate additionality" (version 04.0.0) approved by the CDM Executive Board and fully applicable for JI projects.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".			
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	The barrier analysis and common practice analysis are used for the demonstration of project activity additionality.	OK	OK
29 (b)	Are additionality proofs provided?	Yes, the additionality proofs are provided in the Section B.1 of the PDD.	OK	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	Corrective Action Request 13 The PDD doesn't indicate how registration of the project as JI activity will aid to overcoming the barriers.	CAR 13	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	All explanations, descriptions and analyses were made in accordance with "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 04.0.0).	OK	OK
Approved CDM methodology approach only				
31 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	Not applicable	N/A	N/A
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
31 (c)	Are all explanations, descriptions and analyses with regard to additionality made in accordance with the selected methodology?	Not applicable	N/A	N/A
31 (d)	Are additionality proofs provided?	Not applicable	N/A	N/A
31 (e)	Is the additionality demonstrated appropriately	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	as a result?			
Project boundary (applicable except for JI LULUCF projects				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	The GHGs anthropogenic emissions defined by sources are under the control of the project participants and reasonably attributable to the project. <u>Corrective Action Request 14</u> Please provide the reference on Guidance mentioned in the Section B.3	CAR 14	OK
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?	Yes, the project boundary is defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above.	OK	OK
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	Yes, the project boundary is provided in the Figure 3.1 and Figure 3.2 and in tabular format in the Table 4.	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?	Please refer to the CAR 14 above.	OK	OK
Approved CDM methodology approach only				
33	Is the project boundary defined in accordance with the approved CDM methodology?	Not applicable	N/A	N/A
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?	23/11/2003 is the starting date of the project. It is the date of coming into force of the *Order on appointment of working team responsible for enterprise technical rehabilitation and production organic wastes utilization improvement* issued by the LLC “TH “Shepetivsky Sugar”.		OK
34 (a)	Is the starting date after the beginning of 2000?	Yes.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	25 years (300 months). Clarification Request 01 Please specify the expected operational lifetime of the project.	CL 01	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	Corrective Action Request 15 Please indicate the total length of the crediting period. Clarification Request 02 Please clarify the date of "the end of the crediting period" in the Section C.3. Clarification Request 03 Please clarify the date (3 years or 36 months (01/08/2005-31/12/2007) indicated in the phrase "the Length of the period before the first crediting period" in Section C.3	CAR 15 CL 02 CL 03	OK
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	Yes, the starting date of the crediting period is after the date of the first emission reductions generated by the project.	OK	OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	Clarification Request 04 Please specify 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.	CL 04	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?	Clarification Request 05 Please specify that if the crediting period extends beyond 2012, such extension is subject to the host Party approval.	CL 05	OK
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used?	JI specific approach was used.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− JI specific approach − Approved CDM methodology 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?	Corrective Action Request 16 Please provide the information on key characteristics and their monitoring during the project activity in tabular format.	CAR 16	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?	Yes, the monitoring plan specifies the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions to be monitored.	OK	OK
36 (b)	If default values are used: − Are accuracy and reasonableness carefully balanced in their selection? − Do the default values originate from recognized sources? − Are the default values supported by statistical analyses providing reasonable confidence levels? − Are the default values presented in a transparent manner?	Corrective Action Request 17 There is no reference on source and page for some parameters (e. g. *f* - share of methane being captured and utilized at the disposal site) used for the ERUs calculation. Please correct.	CAR 17	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	Yes. 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?	Corrective Action Request 18 Please indicate why the data from IPCC 2006 instead of National Inventory are used.	CAR 18	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Is the conservativeness of the values provided justified?			
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Corrective Action Request 19 Please indicate in the PDD the procedure to be followed if expected data are unavailable.	CAR 19	OK
36 (b) (iv)	Are International System Unit (SI units) used?	Yes.	OK	OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	Yes, the *amount of sugar production organic waste (pulp), that was not sold within period x and was transported to the disposal site* is used in calculations and are obtained through monitoring. Clarification request 06 Please provide the information on identifying the *amount of sugar production organic waste, that was not sold and was transported to the disposal site*.	CL 06	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	Yes, the use of parameters, coefficients, variables, etc. 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 developed in accordance with the "Guidance on criteria for baseline setting and monitoring".	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	Yes, all the relevant parameters are described (refer to the Section D.1 of the PDD).	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	not already available at the stage of 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?	The Table in the Section D.1.1 of the PDD defines the frequency of monitoring and data sources for all parameters and data to be monitored.	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?	The PDD describes all algorithms and formulae used for the calculation of baseline and project emissions.	OK	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Yes, the underlying rationale for the algorithms/formulae is explained.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Yes, consistent variables, equation formats, subscripts etc. are used. Corrective Action Request 20 Please indicate data sources for the parameters used in calculations per the provided formulas.	CAR 20	OK
36 (f) (iii)	Are all equations numbered?	Yes. Corrective Action Request 21 Please make amendments in the numbering of formulas, making it consistent.	CAR 21	OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes, the documents analysis justifies the conservativeness of the algorithms/procedures .	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	The level of data uncertainty is provided in the quality control and assurance table (refer to the section D.2 of the PDD).	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Taking into account that almost all data and parameters are based on the statistical data and calibrated measuring equipment recordings of a certain class of accuracy and tested by the official energy resources supplier and state bodies, their level of uncertainty is considered as low.		
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?	Yes, the consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline is ensured.	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	No, all the algorithms and formulae are explicitly explained.	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Clarification request 07 Please provide the information that the calculation procedure of *Px* - the *amount of sugar production organic waste, that was not sold and was transported to the disposal site* complies with the standard technical procedures used in the sugar production industry.	CL 07	OK
36 (f) (vii)	Are references provided as necessary?	Please refer to CAR 17.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	Yes, implicit and explicit key assumptions are explained in a transparent manner.	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	Used assumptions and procedures do not have any significant uncertainty associated with them.	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?	Level of uncertainty is indicated as low.	OK	OK
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such	All the monitoring plans used in the proposed monitoring plan are the common practice for Ukraine on power	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?	metering.		
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	Statistical methods for emissions assessment are not used.	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?	The quality assurance and control procedures for the monitoring process are described in the Section D.2 of the PDD.	OK	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Yes, the monitoring plan in the Section D.3 of the PDD clearly identifies the responsibilities and authorities regarding the monitoring activities.	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?	Corrective Action Request 22 The Section D.1.5 of the PDD requires from the project participants to indicate the information on data collection and archivation concerning the environmental impact and to provide references on the relevant Host Party regulations. Please make the relevant corrections.	CAR 22	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	Yes, all the parameters are provided in Sections D.1.1.1 and D.1.1.3 of the PDD.	OK	OK
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be	Refer to CAR 16.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	kept for two years after the last transfer of ERUs for the project?			
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?	No elements or combinations of approved CDM methodologies or methodological tools are used in the monitoring plan.	OK	OK
Approved CDM methodology approach only				
38 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	Not applicable	N/A	N/A
38 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	Not applicable	N/A	N/A
38 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
38 (c)	Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with the referenced approved CDM methodology?	Not applicable	N/A	N/A
38 (d)	Is the monitoring plan established appropriately as a result?	Not applicable	N/A	N/A
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 overlapping of monitoring periods is envisaged during the crediting period.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	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?			
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?	No leakages are envisaged by the proposed project activity.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	No leakages are envisaged by the proposed project activity.	OK	OK
Approved CDM methodology approach only				
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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	Baseline and project scenario emissions were assessed.	OK	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 project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	The PDD provides ex ante estimates of the project and baseline scenarios, and also emissions reduction. The estimated results are provided in the Section E of the PDD, and also in the Excel spreadsheets.	OK	OK
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?	Not applicable	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-sink basis? (iv) For each GHG? (v) In tones of CO2 equivalent, using global	Emission reductions calculation provided in the PDD of the proposed project complies with all the requirements envisaged by the DVM section 45.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent? (e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the			

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	Yes, the PDD includes an illustrative ex ante emissions calculation.	OK	OK
Approved CDM methodology approach only				
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	Not applicable	N/A	N/A
47 (b)	Is the estimation of emission reductions or enhancements of net removals presented in the PDD: − On a periodic basis? − At least from the beginning until the end of the crediting period? − On a source-by-source/sink-by-sink basis? − For each GHG? − In tones 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? − Are the formula used for calculating the estimates consistent throughout the PDD? − Are the estimates consistent throughout the PDD? − 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	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	by twelve?			
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?	Corrective Action Request 23 The information on transboundary impacts of the project provided in the PDD has to be transparent and justified.	CAR 23	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?	All activities under the project do not envisage any negative impacts on the environment; therefore no EIA was specifically developed for this project.	OK	OK
Environmental impacts				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	The procedures of Ukraine don't require any stakeholder consultation concerning the proposed project.	OK	OK
Determination regarding small-scale projects (additional elements for assessment)				
50	Does the PDD appropriately specify and justify the SSC project type(s) and category(ies) that fall under: (a) One of the types and thresholds of JI SSC projects as defined in .Provisions for joint implementation small-scale projects.? If	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the project contains more than one JI SSC project type component, does each component meet the relevant threshold criterion? (b) One of the SSC project categories defined in the most recent version of appendix B of annex II to decision 4/CMP.1, or an additional project category approved by the JISC in accordance with the relevant provision in "Provisions for joint implementation small-scale projects"?			
51	Does the SSC PDD confirms and shows that the proposed JI SSC project is not a debundled component of a large project by explaining that there does not exist a JI (SSC) project with a publicly available determination in accordance with paragraph 34 of the JI guidelines: (a) Which has the same project participants; and (b) Which applies the same technology/measure and pertains to the same project category; and (c) Whose determination has been made publicly available in accordance with paragraph 34 of the JI guidelines within the previous 2 years; and (d) Whose project boundary is within 1 km of the project boundary of the proposed JI SSC project at the closest point?	Not applicable	N/A	N/A
Applicable to bundled JI SSC projects only				
52 (a)	Do all projects in the bundle: (i) Have the same crediting period? (ii) Comply with the provisions for JI SSC	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	projects defined in "Provisions for joint implementation small-scale projects", in particular the thresholds referred to in 50 (a) above? (iii) Retain their distinctive characteristics (i.e. location, technology/measure etc.)?			
52 (b)	Does the composition of the bundle not change over time?	Not applicable	N/A	N/A
52 (c)	Has the AIE received (from the project participants): (i) Information on the bundle using the form developed by the JISC (F-JI-SSCBUNDLE)? (ii) A written statement signed by all project participants indicating that they agree that their individual projects are part of the bundle and nominating one project participant to represent all project participants in communicating with the JISC? (iii) Indication by the Parties involved that they are aware of the bundle in their project approvals referred to in 19 above?	Not applicable	N/A	N/A
53	If the project participants prepared a single SSC PDD for the bundled JI SSC projects, do(are) all the projects: (a) Pertain to the same JI SSC project category? (b) Apply the same technology or measure? (c) Located in the territory of the same host Party?	Not applicable	N/A	N/A
54	If the project participants prepared separate SSC PDDs for the bundled JI SSC projects, do(are) all the projects:	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(a) Have SSC PDDs been prepared for all JI SSC projects in the bundle? (b) Does each SSC PDD contain a single JI SCC project in the bundle?			
55	If the projects in the bundle use the same baseline, does the F-JI-SSC-BUNDLE provide an appropriate justification for the use of the same baseline considering the particular situation of each project in the bundle?	Not applicable	N/A	N/A
56	Does the PDD indicate which of the following approaches is used for establishing a monitoring plan? (a) By preparing a separate monitoring plan for each of the constituent projects; (b) By preparing an overall monitoring plan including a proposal of monitoring of performance of the constituent projects on a sample basis, as appropriate.	Not applicable	N/A	N/A
56 (b)	If the approach 57 (b) above is used, (i) Are all the JI SSC projects located in the territory of the same host Party? (ii) Do all the JI SSC projects pertain to the same project category? (iii) Do all the JI SSC projects apply the same technology or measure? (iv) Does the overall monitoring plan reflect good monitoring practice appropriate to the bundled JI SSC projects and provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled projects?	Not applicable	N/A	N/A
Applicable to all JI SSC projects				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
57	Is the leakage only within the boundaries of non-Annex I Parties considered?	Not applicable	N/A	N/A
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
58	Does the PDD appropriately specify how the LULUCF project conforms to: (a) The definitions of LULUCF activities included in paragraph 1 of the annex to decision 16/CMP.1, applying good practice guidance for LULUCF as decided by the CMP, as appropriate? (b) In the case of afforestation, reforestation and/or forest management projects, the definition of "forest" selected by the host Party, which specifies: (i) A single minimum tree crown cover value (between 10 and 30 per cent)? and (ii) A single minimum land area value (between 0.05 and 1 hectare)? and (iii) A single minimum tree height value (between 2 and 5 metres)?	Not applicable	N/A	N/A
JI specific approach only				
59	Baseline setting - in addition to 22-26 above Does the PDD provide an explanation how the baseline chosen: − Takes into account the good practice guidance for LULUCF, developed by the IPCC? − Ensures conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol?	Not applicable	N/A	N/A
60	Project boundary - alternative to 32-33 (a) Does the project boundary geographically	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	delineate the JI LULUCF project under the control of the project participants? (a) If the JI LULUCF project contains more than one discrete area of land, (i) Does each discrete area of land have a unique geographical identification? (ii) Is the boundary defined for each discrete area? (ii) Does the boundary not include the areas in between these discrete areas of land? (b) Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant? (c) Does the project boundary account for all changes in the following carbon pools: − Above-ground biomass; − Below-ground biomass; − Litter; − Dead wood; and − Soil organic carbon? (c) Does the PDD provide: (i) The information of which carbon pools are selected? (ii) If one or more carbon pools are not selected, transparent and verifiable information that indicates, based on conservative assumptions, that the pool is not a source? (d) Is the project boundary defined on the basis of a case-by-case assessment with regard to			

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the criteria in (b) above?			
61 (a)	Project boundary - alternative to 32-33 (cont.) Are the delineation of the project boundary and the gases and sources/sinks included appropriately described and justified in the PDD?	Not applicable	N/A	N/A
61 (b)	Project boundary - alternative to 32-33 (cont.) Are all gases and sources/sinks included explicitly stated, and the exclusions of any sources/sinks related to the baseline or the LULUCF project appropriately justified?	Not applicable	N/A	N/A
62	Monitoring plan - in addition to 35-39 Does the PDD provide an appropriate description of the sampling design that will be used for the calculation of the net anthropogenic removals by sinks occurring within the project boundary in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of plots and plot distribution etc.?	Not applicable	N/A	N/A
63	Does the PDD take into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?	Not applicable	N/A	N/A
Approved CDM methodology approach only				
64 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	Not applicable	N/A	N/A
64 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	revised to a newer version in the past two months)?			
64 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
64 (c)	Are all explanations, descriptions and analyses made in accordance with the referenced approved CDM methodology?	Not applicable	N/A	N/A
64 (d)	Are the baseline, additionality, project boundary, monitoring plan, estimation of enhancements of net removals and leakage established appropriately as a result?	Not applicable	N/A	N/A
Determination regarding programmes of activities (additional/alternative elements for assessment)				
66	Does the PDD include: (a) A description of the policy or goal that the JI PoA seeks to promote? (b) A geographical boundary for the JI PoA (e.g. municipality, region within a country, country or several countries) within which all JPAs included in the JI PoA will be implemented? (c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including: − The maintenance of records for each JPA? − A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)? − Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA?	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(d) A description of each type of JPAs that will be included in the JI PoA, including the technology or measures to be used? (e) The eligibility criteria for inclusion of JPAs to the JI PoA for each type of JPA in the JI PoA?			
67	*Project approvals by Parties involved - additional to 19-20* Are all Parties partly or entirely within the geographical boundary for the JI PoA listed as "Parties involved" and indicated as host Parties in the PDD?	Not applicable	N/A	N/A
68	*Authorization of project participants by Parties involved - additional to 21* Is the coordinating entity presented in the PDD authorized by all host Parties to coordinate and manage the JI PoA?	Not applicable	N/A	N/A
69	*Baseline setting - additional to 22-26* Is the baseline established for each type of JPA?	Not applicable	N/A	N/A
70	*Additionality - additional to 27-31* Does the PDD indicate at which of the following levels that additionality is demonstrated? (a) For the JI PoA (b) For each type of JPA	Not applicable	N/A	N/A
71	*Crediting period - additional to 34* Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?	Not applicable	N/A	N/A
72	*Monitoring plan - additional to 35-39* Is the monitoring plan established for each technology and/or measure under each type of JPA included in the JI PoA?	Not applicable	N/A	N/A
73	Does the PDD include a table listing at least	Not applicable	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	one real JPA for each type of JPA?			
73	For each real JPA listed, does the PDD provide the information of: (a) Name and brief summary of the JPA? (b) The type of JPA? (c) A geographical reference or other means of identification? (d) The name and contact details of the entity/individual responsible for the operation of the JPA? (e) The host Party(ies)? (f) The starting date of the JPA? (g) The length of the crediting period of the JPA? (h) Confirmation that the JPA meets all the eligibility requirements for its type, including a description of how these requirements are met? (i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?	Not applicable	N/A	N/A

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 participant response	Determination team conclusion
Corrective Action Request 01 Please add brief description of the baseline scenario.	-	The brief description of the baseline scenario is provided in the Section A.2. of the PDD version 2.0.	The issue is closed.
Corrective Action Request 02 Please add technical summery of the project scenario.	-	The technical summery of the project scenario is provided in the Section A.2. of the PDD version 2.0.	The issue is closed.
Corrective Action Request 03 Please use in the PDD the font prescribed by the JI PDD Form, version 01.	-	The right font size (11) is used in the PDD version 2.0.	The issue is closed.
Corrective Action Request 04 Please specify the starting date of the project and provide the justifying document to the AIE.	-	27/06/2003 is the starting date of the project. It is the date of coming into force of the Order on appointment of working team responsible for enterprise technical rehabilitation and production organic wastes utilization improvement issued by the LLC “TH “Shepetivsky Sugar”.	The issue is closed.

Corrective Action Request 05 The Table A.3 of the PDD has to comply with the format envisaged by the Guidelines for Users of the JI PDD Form, version 04.	-	The table A.3 of the PDD version 2.0 was provided in the relevant format.	The issue is closed.
Corrective Action Request 06 Old information concerning KVED types of economic activities is presented in Annex 1. Please update the information as per valid certificate.	-	The require information was corrected in the PDD version 2.0.	The issue is closed.
Corrective Action Request 07 The Section A.4.1 has to comply with the format envisaged by the Guidelines for Users of the JI PDD Form, version 04.	-	The Section A.4.1 was correspondingly amended in the PDD version 2.0.	The issue is closed.
Corrective Action Request 08 Please provide the reference on the relevant Excel spreadsheet with calculations.	-	The reference on Excel spreadsheet with calculations was added to the Section A.4.3.1 and the Section E. Please refer to the updated PDD version 2.0	The issue is closed.
Corrective Action Request 09 Please provide in the Section A.4.3.1 the total amount of emission reductions estimated for the crediting period.	-	The PDD version 2.0 was amended correspondingly.	The issue is closed.
Corrective Action Request 10 The names of the DFP (of the Parties involved) authorizing the project have to be indicated in the Section A.5.	19	The information will be provided later.	Pending
Corrective Action Request 11 There are no Letters of Approval from the Parties involved.	19	As per the procedures of the Parties involved the relevant Letters of Approval will be provided after issuance of the positive determination report.	Pending

Corrective Action Request 12 The PDD doesn't explicitly state the approach chosen for setting the baseline. Please correct.	22	Project participants chose an approach for baseline setting and monitoring developed in accordance with appendix B of the JI guidelines (JI specific approach). The relevant information was added to the Section B.1 of the PDD version 2.0.	The issue is closed.
Corrective Action Request 13: The PDD doesn't indicate how registration of the project as JI activity will aid to overcoming the barriers.	29 (c)	As demonstrated in the Section B.1, the main barrier that prevents the project implementation is financial. As a result of selling greenhouse gas emission reductions expected revenues of about 3.9 million Euros or 39 million UAH, representing about 45% required for the project funds that are weighty argument when making decision on the project. Thus, participation in joint implementation mechanism eliminates barriers for the project. Such information was indicated in the Section B.2 of the PDD version 2.0.	The issue is closed.
Corrective Action Request 14 Please provide the reference on Guidance mentioned in the Section B.3	32 (a)	The reference on Guidance mentioned in the Section B.3 was provided in the PDD version 2.0	The issue is closed.
Clarification Request 01 Please specify the expected operational lifetime of the project.	34 (b)	The information was provided in the PDD version 2.0, Section C.3.	The issue is closed.

Corrective Action Request 15 Please indicate the total length of the crediting period.	34 (c)	The total length of the crediting period is 25 years or 300 months (01/01/2005-31/12/2029). The relevant information was provided in the Section C.3 of the PDD version 2.0.	The issue is closed.
Clarification Request 02 Please clarify the date of "the end of the crediting period" in the Section C.3.	34 (c)	The date of the end of crediting period is meant here. The relevant information was provided in the Section C.3 of the PDD version 2.0.	The issue is closed.
Clarification Request 03 Please clarify the date (3 years or 36 months (01/08/2005-31/12/2007) indicated in the phrase "the Length of the period before the first crediting period" in Section C.3	34 (c)	The information was provided mistakenly. The PDD version 2.0 now contains appropriate information.	The issue is closed.
Clarification Request 04 Please specify 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.	34 (d)	The relevant information was provided in the Section C.3 of the PDD version 2.0.	The issue is closed.

Clarification Request 05 Please specify that if the crediting period extends beyond 2012, such extension is subject to the host Party approval.	34 (d)	Status of emission reductions or enhancements of removals generated by JI project after the first commitment period under the Kyoto Protocol (extension of the crediting period after 2012) may be determined in accordance with relevant arrangements and procedures under the UNFCCC and host Party. The relevant information was provided in the Section C.3 of the PDD version 2.0.	The issue is closed.
Corrective Action Request 16 Please provide the information on key characteristics and their monitoring during the project activity in tabular format.	36 (a)	The information on key characteristics and their monitoring during the project activity was provided in tabular format in the PDD version 2.0.	The issue is closed.
Corrective Action Request 17 There is no reference on source and page for some parameters (e. g. f - share of methane being captured and utilized at the disposal site) used for the ERUs calculation. Please correct.	36 (b)	In this case, the source for this parameter is the data provided by the project owner. No technologies or units for landfill gas (which contains methane) capture were used at the landfill for pulp utilization Reference on project owner data was added to the PDD version 2.0.	The issue is closed.

Corrective Action Request 18: Please indicate why the data from IPCC 2006 instead of National Inventory are used.	36 (b) (ii)	Indeed, at the moment of the PDD design, the National Inventory Report contained the values of some variables used for calculations in this project (DOC and MCF parameters). The reasons of using the data from IPCC instead of National Inventory are the following: 1. Data indicated in the National Inventory is the average data for all solid waste landfills assessed based on the average morphological content of solid wastes located at the disposal site. IPCC data is used for the project, because they fully match the type of the project wastes – pulp. 2. IPCC data is reliable and conservative data source. Their usage doesn't lead to overestimation of the project ER calculation results which is justified by the huge amount of registered JI projects.	The issue is closed.
Corrective Action Request 19 Please indicate in the PDD the procedure to be followed if expected data are unavailable.	36 (b) (iii)	Project implementation is under the control of special appointed team which is responsible for collection, archivation and storage of documentation relevant to the project. All information is stored on hard and electronic copies. Thus it makes the possibility of any data from any sources absence very low.	The issue is closed.

Clarification request 06 Please provide the information on identifying the *amount of sugar production organic waste, that was not sold and was transported to the disposal site*.	36 (b) (v)	The Section D.2 of the PDD version 2.0 was appropriately modified.	The issue is closed.
Corrective Action Request 20 Please indicate data sources for the parameters used in calculations per the provided formulas.	36 (f) (ii)	Data sources were indicated and specified in the PDD version 2.0.	The issue is closed.
Corrective Action Request 21 Please make amendments in the numbering of formulas, making it consistent.	36 (f) (iii)	The numbering of formulas was corrected in the PDD version 2.0.	The issue is closed.
Clarification request 07 Please provide the information that the calculation procedure of *Px - the amount of sugar production organic waste, that was not sold and was transported to the disposal site* complies with the standard technical procedures used in the sugar production industry.	36 (f) (vii)	The Section D.2 of the PDD version 2.0 was appropriately modified. Yes, the calculation procedure of *Px - the amount of sugar production organic waste, that was not sold and was transported to the disposal site* complies with the standard technical procedures used in the sugar production industry.	The issue is closed.
Corrective Action Request 22 The Section D.1.5 of the PDD requires from the project participants to indicate the information on data collection and archivation concerning the environmental impact and to provide references on the relevant Host Party regulations. Please make the relevant corrections.	36 (k)	There is no negative environmental impact as the result of project implementation. It is not applicable as per the regulations of the host Party. The relevant information was added to the PDD version 2.0.	The issue is closed.

Corrective Action Request 23 The information on transboundary impacts of the project provided in the PDD has to be transparent and justified.	48 (a)	Since the project does not lead to negative impacts on the environment, transboundary impacts that occur in any other country, and are caused by implementation of this project, which is physically located entirely within Ukraine, are absent. The relevant information was added to the PDD version 2.0.	The issue is closed.