DETERMINATION REPORT
"MT-INVEST CARBON" LLC

DETERMINATION OF THE "IMPLEMENTATION OF TECHNOLOGICAL MODERNIZATION OF INSTALLATIONS WITH THE AIM OF THE INTRODUCTION OF SUGAR PRODUCTION ORGANIC WASTE MANAGEMENT SYSTEM FOR THE SUGAR FACTORIES PARTICIPATING IN THE JOINT ACTIVITIES"

REPORT NO. UKRAINE-DET/0555/2012

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DETERMINATION REPORT

Date of first issue:	Organizational unit:
08/10/2012	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
"MT-Invest Carbon" LLC	Mr. Falendysh Yaroslav

Summary:

Bureau Veritas Certification has made the determination of the "Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities" project of "MT-Invest Carbon" LLC located in Ternopil 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/0555/2012	JI

Project title:
"Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities"

Work carried out by:
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1 INTRODUCTION

"MT-Invest Carbon" LLC has commissioned Bureau Veritas Certification to determine its JI project "Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities" (hereafter called "the project") at the Ternopil 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:

Rostislav Topchiy
Bureau Veritas Certification, Climate Change Lead Verifier

Vitaliy Minyaylo

Bureau Veritas Certification, Climate Change Verifier

Denis Pishchalov
Bureau Veritas Certification, Financial Specialist

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 on 21/09/2012.

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

2.2 Follow-up Interviews

On 01/08/2012 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 Khorostkivskiy Sugar Plant LLC, Limited Liability Company "Kozivskiy Sugar Plant", Limited Liability Company "Lanovetskiy Sugar Plant", Limited Liability Company "Borshivskiy Sugar Plant", Limited Liability Company "Buchatskiy Sugar Plant", Limited Liability Company "Zbarazkiy Sugar Plant" and "MT-Invest Carbon" LLC were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Khorostkivskiy Sugar Plant LLC and other project partners	➢ Project history ➢ Project approach ➢ Project boundary ➢ Implementation schedule ➢ Organizational structure ➢ Responsibilities and authorities ➢ Training of personnel ➢ Quality management procedures and technology ➢ Rehabilitation/Implementation of equipment (records) ➢ Metering equipment control ➢ Metering record keeping system, database ➢ Technical documentation ➢ Monitoring plan and procedures ➢ Permits and licenses ➢ Local stakeholder's response.
CONSULTANT: "MT-Invest Carbon" LLC	➢ Baseline methodology ➢ Monitoring plan ➢ Additionality proofs ➢ Calculation of emission reduction.

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the project design.

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

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

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

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

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

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

3 PROJECT DESCRIPTION

The project aims at improving and modernizing the practice of recycling of organic waste at sugar plants, included in the project boundaries. The project activity results in decrease of the amount of sugar beet pulp to be disposed in landfills, where due to decomposition of organic matter in the pulp under anaerobic conditions the methane releases, which is a greenhouse gas.

The project has been implemented at five sugar plants of the Ternopil Region of Ukraine. Khorostkivskiy Sugar Plant LLC coordinates the project activity. Sugar beet pulp is a by-product of its production, which is a spent sugar-beet chips. This product has valuable feed properties and can be successfully used for feeding cattle, which eats good quality pulp in any form: fresh, benign acidic, siloing or dry. The technical process of sugar plants involves the production of fresh pulp ~~containing 91% of water or even more.~~ The high content of organic components ~~and water~~ makes it an excellent environment for intensive growth of microorganisms that cause rapid deterioration of pulp (within 24 hours after being produced),

though it can no longer be used for feeding cattle and must be taken to landfills for disposal as an organic waste. ~~Reducing~~Drying the ~~water content up to 80%~~pulp makes it suitable for ensiling (preservation of pulp by creating conditions for lactic acid fermentation). The period of pulp storage can be increased to one year and more, when it is air-tightly preserved. By ensuring a deeper pulp extraction, the plants expand opportunities to use the beneficial beet pulp, which increases the demand, consequently reducing the amount of pulp that could deteriorate. However, the shelf life for pulp silage is short as well, so the range of consumers is limited to livestock breeding complexes, located near the sugar plant. To increase the amount of pulp that can be recycled, it is required to ~~reduce its water content to 14% and less.~~dry it. For this purposes the pulp drying and granulation equipment is used. The resulting product is suitable for long-term warehousing and transportation for long distances.

The proposed project activity provides the introduction of deeper pulp extraction and drying systems: installation of additional presses of deeper extraction, use of pulp drying and granulation units. Currently, most planned activities are already implemented and lead to the generation of CO_2 emissions reductions.

a) Situation existing prior to the starting date of the project:
Before the project realization, equipment and infrastructure (warehouses, adjusted logistics system) necessary to decrease moisture content in the pulp, where fore it quickly deteriorated, and this valuable feed resource turned into organic waste, which at first was stored in pulp pits (up to three months) and then transported to landfills. When emptying the pulp pits from deteriorated pulp, 3-5% of its mass left at the pit bottom, containing a large number of microorganisms that rapidly contaminated new pulp and speeded up the pace of its deterioration. Due to the use of this practice, the pulp produced at the JI project plants could not be used for feeding cattle and was disposed at landfills.

b) Baseline scenario:
In the baseline scenario in the absence of the project the situation would continue: companies would still store sugar beet pulp in pits in the substance as it was produced, with no additional actions aimed at reduction of its moisture content. After filling the pulp pits with pulp, it would be transported and disposed at landfills. This scenario foresees decomposition of organic matter with the generation of landfill gas containing greenhouse gas –methane.

Sugar production is a main business activity of the sugar plants. However, other products or waste is secondary and those to which not much attention is paid. The base scenario envisaged the continuation of the

pulp handling practice that used to be applied by the plants. This scenario does not require any changes to the technical process of the plant, investment and does not face any barriers.

c) Project scenario
Project scenario assumes installation of equipment for decreasing of moisture content in the pulp, which allows its beneficial utilization as feed for cattle, thus it is not to be disposed at landfills and methane does not release into the atmosphere in result of pulp decomposition.

The identified areas of concern as to Description of the project, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 01, CAR 02, CAR 03, CAR 04, CAR 05, CAR 06, CAR 07, CAR 08, 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 20 Corrective Action Requests, 11 Clarification.

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

4.1 Project approvals by Parties involved (19-20)

The project has already received Letter of Endorsement № 2683/23/7 on the JI project "Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities" dated 20/09/2012 issued by State Environmental Investment Agency of Ukraine.

Bureau Veritas Certification received this letter from the project participants and does not doubt its authenticity.

As for the time being no written approvals of the project by Parties involved are available. After receiving Determination Report from the Accredited Independent Entity the project documentation will be submitted

to the Ukrainian Designated Focal Point (DFP) which is State Environmental Investment Agency of Ukraine, for receiving a Letter of Approval. The written approval by another Parties involved will be obtained later on.

Bureau Veritas Certification will check the letters against paragraphs 19 - 20 of the DVM.

As the project has no approvals by the Parties involved, CAR 10 remains pending and will be closed after report finalizing (refer to the Appendix A).

4.2 Authorization of project participants by Parties involved (21)

The official authorization of each legal entity listed as project participant in the PDD by Parties involved will be provided in the written project approvals (refer to 4.1 above).

4.3 Baseline setting (22-26)

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

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

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

- *Continuation of existing situation that does not require any additional investment*. Fresh sugar beet pulp in that form as it has been produced, without any additional operations aimed at its drying, addition of dry biomass, etc., it would be disposed to pulp pits, where as far as they are filled and decayed, it would be transported to the landfill, where it would be buried respectively to the specified limits on waste disposal. This option did not need any additional investment.
- *Utilization of sugar beet pulp along with the production of biogas.* This option provides introduction of methane tank to control anaerobic digestion of waste resulting from sugar production with the addition of dry biomass, installation of special equipment for enrichment and purification of the

obtained methane and construction of necessary infrastructure for its combustion to generate heat or electricity (boilers or generators). This option also requires constant provision of dry biomass and other additives to intensify the process of fermentation and improve the properties of the material obtained that can be used as a fertilizer. If this application of regenerated material is not possible, as a result of the process less amount of waste will be received, when the potential emission of methane is close to zero, which will be subject to disposal in the repository.

- *Preparation of pulp for use as feed for cattle.* All kinds of well-preserved pulp can be used as feed for livestock. To extend the period of pulp preservation and to improve its feed value, it is subject to various kinds of processing (siloing, drying, granulation, the enrichment with protein substitutes). This allows for expanding the circle of potential consumers of feed pulp due to increase of distance, where the better pulp could be delivered, and increase the amount of pulp that can be used as feed. This option requires installation of special equipment for pulp drying and granulating and the construction of facilities for warehousing of dry products obtained. Project participants consider that pulp siloing using their own resources is irrational, because it requires a containers of large volume, in which pulp could be preserved air-tightly for long periods (ensiling process takes 6-8 weeks, after which it can be used); or large areas of storage facilities using large hermetic tubular sheeting up to 350 tons of silage volume. Transportation of siloing pulp over long distances is also complicated, since the pulp being under aerobic conditions rapidly deteriorates, thus it would be rational to perform siloing in close proximity to the consumer. ~~However, despite the fact that the siloing is suitable only for pulp with dry matter content above 20%,~~However, project participants are interested in using additional pulp presses for deeper extraction of pulp, therefore increasing the amount of fresh pulp that can be potentially realized at livestock complexes.
- *Production of beet pectin, pectin glue or dietary fiber from pulp.* Sugar beet pulp is one of the most promising raw materials for low etherified pectin production, which is widely used in medicine, pharmacology and in confectionery industry due to its bactericidal properties, the ability to form water-soluble films, the ability to bind heavy metal ions. For extraction of pectin from pulp method of hydrolysis with mineral acids are most commonly used. In addition, pectin glue can be obtained from the pulp, the manufacturing process of which is the conversion of insoluble in cold water and pectin substances arabane into the solution. Glue outcome is 2.5-3% of the fresh pulp weight. Another promising area in the pulp processing is dietary fibres

production – edible parts of plants or similar carbohydrates resistant to digestion and absorption in the small intestine, which are completely or partly fermented in the large intestine. The daily human need in food fibers is 28-38 grams. Applying modern technologies of fiber production, pulp is used to manufacture the products that can be widely applied in manufacturing of wide range of foods products. Project participants would consider this alternative implementation as the need to build and equip some enterprise for the production of pectin from fresh or dried pulp. At the time of the decision-making on project, proposals from third parties who are ready to invest in such activities have not been reported.

(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:

- Activities attributed to waste management in Ukraine are governed by the following regulations: The Law of Ukraine “On ensuring sanitary- epidemiological welfare of population”, the Law of Ukraine “On wastes”; the Law of Ukraine “On licensing system in economic activity”; the Cabinet of Ministers of Ukraine Decree # 1218 dated 03/08/1998 “On approval of the procedure of drafting, approval and revision of waste generation and placement limits”, the Cabinet of Ministers of Ukraine Decree # 1109 dated 22/06/1999 “On approval of the Statute of the State sanitary and epidemiological surveillance in Ukraine”, President of Ukraine Decree # 400/2011 dated 06/04/2011 “On state sanitary-epidemiological service of Ukraine”.
- According to the provisions of this legislative environment, companies must receive from waste management designated executive authorities permits for waste disposal within the established limits in storages equipped in accordance with the applicable standards, and by paying the corresponding fee for waste disposal. In accordance with Instruction on procedure of calculation and payment for environmental pollution tax # 162 approved by the Ministry of Environmental Protection and Nuclear Safety of Ukraine and State Tax Administration of Ukraine dated 19/07/99 with changes and amendments adopted by the Order of Ministry of Environmental Protection and Nuclear Safety of Ukraine # 24/37 dated 27/01/2000, which was in force at the time of decision making about project

implementation, in case of overlimiting waste disposal the fine is paid a five times the amount of the fee for waste disposal.

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

4.4 Additionality (27-31)

The most recent version of the "Combined tool to identify the baseline scenario and demonstrate additionality" approved by the CDM Executive Board was used. All explanations, descriptions and analyses are made in accordance with the selected tool.

Additionality proofs are provided. Four alternative scenarios to the project activity were identified and proven to be in compliance with mandatory legislation and regulations taking into account the enforcement in the region and Ukraine.

The main barrier that prevents the project implementation is financial. As a result of selling greenhouse gas emission reductions expected revenues of about 18.8 million euro or 188 million UAH, which is much more then the project funds required, that is weighty argument when making decision on the project. Thus, participation in joint implementation mechanism eliminates barriers for the project.

Additionality is demonstrated appropriately as a result of the analysis using the approach chosen.

The identified areas of concern as to Additionality, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 11, CAR 12, CL 01).

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, such as anaerobic fermentation of sugar plant waste (pulp);

(ii) Reasonably attributable to the project such as natural gas consumption by pulp drying units, electricity consumption by pulp drying units; and

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

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

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project began, and the starting date is 19/01/2004, 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 (300 months).

The PDD states the length of the crediting period in years and months, which is 25 years or 300 months (3 years or 36 months for the period before the first commitment period, 5 years or 60 months for the first commitment period and 17 years or 204 months for the period following the first commitment period) and its starting date as 01/01/2005, which is on the date the first emission reductions 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 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 Crediting period, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 13).

4.7 Monitoring plan (35-39)

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

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

performance, such as statistics data; quality control (QC) and quality assurance (QA) procedures, schemes of monitoring system and data collection for Monitoring Report, responsibilities for data management the operational and management structure that will be applied in implementing the monitoring plan.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. are clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions to be monitored such as amount of sugar plant waste (pulp), which were not sold and were disposed to the landfill, amount of sugar plant waste (pulp), which would be disposed at the landfill.

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, which are absent.

(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, which are absent.

(iii) Data and parameters that are monitored throughout the crediting period, such as amount of sugar plant waste (pulp), which were not sold and were disposed to the landfill, amount of sugar plant waste (pulp), which would be disposed at the landfill.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, such as direct measurement with gas and electricity meters; calculations with different recording frequency such as monthly and electronic or paper recording method.

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

Emissions generated after the project activity implementation are calculated as follows:

$$PE_y = \sum_{i=1}^{n} PE_{i,biomass,y}$$

where:

PE_y	Project GHG emissions due to project implementation in period y, (tCO_2e);
$PE_{i,biomass,y}$	Project methane emissions due to the decomposition of organic waste of the plant i at the landfill in the period y, (tCO_2e);
i	Project plant index;
n	Number of project plants.

Baseline emissions are calculated as follows:

$$BE_y = \sum_{i=1}^{n} BE_{i,biomass,y}$$

where:

BE_y	Baseline GHG emissions in the period y, (tCO_2e);
$BE_{i,biomass,y}$	Baseline CH_4 emissions from degradable organic waste of i-plant at the landfill in the period y, (tCO_2e);
i	Project plant index;
n	Number of project plants.

The annual emission reductions are calculated as follows:

$$ER_y = BE_y – LE_y – PE_y$$

where:

ERy	Emission reduction under JI project in period y, (tCO_2e);
LEy	Leakage due to the project realization in period y, (tCO_2e);
BEy	Baseline emissions in period y, (tCO_2e);
PEy	Project emissions in period y, (tCO_2e).

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

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

Khorostkivskiy Sugar Plant LLC coordinates the joint activity. Sugar plant management headed by the Director will be responsible for performance monitoring, data collection, registration, visualization, archiving of monitoring data, and periodic inspection of measuring devices.

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 Monitoring plan, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 14, CL 02, CL 03, CAR 15, CAR 16, CAR 17, CAR 18).

4.8 Leakage (40-41)

No leakage is expected in proposed project activity.

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

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

The PDD provides the ex ante estimates of:

(a) Emissions for the project scenario (within the project boundary), which are 0 tonnes of CO_2e for 2005-2007, 0 tonnes of CO_2e for 2008-2012, and 0 tonnes of CO_2e for 2013-2029.

(b) No leakage is expected.

(c) Emissions for the baseline scenario (within the project boundary), which are 1450050 tonnes of CO_2e for 2005-2007, 5246951 tonnes of CO_2e for 2008-2012, and 41146271 tonnes of CO_2e for 2013-2029.

(d) Emission reductions adjusted by leakage, which are 1450050 tonnes of CO_2e for 2005-2007, 5246951 tonnes of CO_2e for 2008-2012, and 41146271 tonnes of CO_2e for 2013-2029.

The estimates referred to above are given:

(a) On a annual basis;

(b) From 01/01/2005 to 31/12/2029, covering the whole crediting period;

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

(d) For each GHG gas, which are 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 the same as those used for project monitoring and described in the section 4.7 above. All formulas are consistent throughout the PDD.

For calculating the estimates referred to above, key factors, e.g. fuel and equipment prices and availability, expected market development, etc. influencing the baseline emissions or removals and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above, such as statistic data, actual historical monitored data, IPCC etc. are clearly identified, reliable and transparent.

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

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions 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 identified areas of concern as to Estimation of emission reductions or enhancements of net removals, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CL 04).

4.10 Environmental impacts (48)

The full scope EIA in accordance with the Ukrainian legislation has been conducted for each of the sugar plants attributed to the proposed project.

In general, the environmental impact of the project activity implementation is positive. Changing the methods of waste management reduces pollution of groundwater with products of pulp decomposition during its storage at the landfills that also significantly effects on the conditions for the growth of pathogenic flora that may also spread through groundwater. In addition, less amount of pulp anaerobic fermentation products release into the atmosphere, not only methane that in toxicology is classified as industrial poison, but also ammonia, hydrogen sulfide and carbon monoxide.

Implementation of the project activity also has a positive social impact through removing of the concentrated odor coming from pulp pits and improving working conditions at sugar plants. Since most of the farms are located in rural areas, where the use of well water is widespread, the reduction of groundwater pollution has positive effects on health of locals.

No transboundary effects are not identified. Impacts that occur in any other country, and caused by the implementation of this project physically located entirely within Ukraine, were not identified.

The identified areas of concern as to Environmental impacts, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 19, CAR 20, CL 05, CL 06, CL 07, CL 08, CL 09, CL10).

4.11 Stakeholder consultation (49)

No stakeholder consultation process for the JI projects is required by the Host Party. Stakeholder comments will be collected during the time of PDD publication in the internet during the determination procedure.

The identified areas of concern as to Stakeholder consultation, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CL 11).

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 installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities" project in the Ternopil Region, Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

Project participant used the latest version of "Combined tool to identify the baseline scenario and demonstrate additionality". In line with this tool, the PDD provides barrier analysis, investment 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 two pending issues 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 2.1 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

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

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

7 REFERENCES

Category 1 Documents:
Documents provided by "MT-Invest Carbon" LLC and that relate directly to the GHG components of the project.

/1/ PDD "Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities", version 1.0 dated 10/07/2012
/2/ PDD "Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities", version 2.1 dated 21/09/2012
/3/ Guidelines for Users of the Join Implementation Project Design Document Form, version 04, JISC
/4/ Joint Implementation Project Design Document Form, version 01
/5/ Glossary of JI terms, version 03, JISC.
/6/ Guidance on Criteria for Baseline Setting and Monitoring, version 03, JISC.
/7/ Combined tool to identify the baseline scenario and demonstrate additionality, Version 04
/8/ JISC "Clarification regarding the public availability of documents under the verification procedure under the Joint Implementation Supervisory Committee." Version 03
/9/ Joint Implementation Determination and Verification Manual. Version 01
/10/ Letter of Endorsement № 2683/23/7 on the JI project "Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities" dated 20/09/2012 issued by State Environmental Investment Agency of Ukraine

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

№	Name of the document
1.	Agreement number 240512 on joint activity for implementation through joint action JI project to reduce greenhouse gas emissions, which is implemented in accordance with Article 6 of the Kyoto Protocol to the UN Framework Convention on Climate Change on May 24, 2012.
2.	GOST 17421-82. Beet sugar for industrial processing.

3.	List of measuring devices that are in operation and are subject to verification in 2012 (geometric) Khorostkivskiy Sugar Plant LLC
4.	List of measuring devices that are in operation and are subject to verification in 2012 (physical and chemical) Khorostkivskiy Sugar Plant LLC
5.	List of measuring devices that are in operation and are subject to verification in 2012 (Optical PHYSICAL) Khorostkivskiy Sugar Plant LLC
6.	List of measuring devices that are in operation and are subject to verification in 2012 (pressure) Khorostkivskiy Sugar Plant LLC
7.	List of measuring devices that are in operation and are subject to verification in 2012 (temperature) Khorostkivskiy Sugar Plant LLC
8.	List of measuring devices that are in operation and are subject to verification in 2012 (Electrical) Khorostkivskiy Sugar Plant LLC gar factory"
9.	List of measuring devices that are in operation and are subject to verification in 2012 (mechanical) Khorostkivskiy Sugar Plant LLC
10.	Acceptance protocol of the works of calibration of measuring instruments from 31 August 2011. SE "Ternopilstandardmetrologia"
11.	Reference of performance pulp drying and granulation complex for 2005-2011 Khorostkivskiy Sugar Plant LLC
12.	Passport 25080879.00001.001 PS to automated Weighting complex "Skiff AVK6018"
13.	Logbook calibration of weights
14.	Instruction of registration and dispensing beet pulp on sugar factories
15.	Acceptance Act #1 Khorostkivskiy Sugar Plant LLC from October 9, 2007
16.	Acceptance Act #3 Khorostkivskiy Sugar Plant LLC from October 9, 2007
	Limited Liability Company "Kozivskiy Sugar Plant"
17.	Reference of performance pulp drying and granulation complex for 2005-2011 Limited Liability Company "Kozivskiy Sugar Plant"
18.	Passport pulp drying and granulation complex № 76011
19.	Contract of sale equipment from October 2, 2008
20.	Acceptance act on the object of sale under contract of sale equipment from October 2, 2008
21.	Acceptance act of the works of calibration of measuring instruments (weights) from July 7, 2012 SE "Ternopilstandardmetrologia"

22.	Information on testing electronic weighing machine VOT number 3198899
23.	Information on testing electronic weighing machine number 3198885
24.	The act of sampling emissions from stationary sources number 55 on September 18, 2009
25.	Resolution № 6123055100-9 the emission of pollutants into the air from stationary sources of 25.12.2009 p
26.	Resolution number 08/01 on waste disposal in 2009 of 24.04.2009
27.	Resolution number 08/01 on waste disposal in 2010 of 16.06.2009
28.	Resolution number 08/01 on waste disposal in 2011 of 29.03.2010
29.	Protocol number 53 measurements of pollutants in emissions from stationary sources from November 12, 2010
30.	Protocol number 5 meeting of the commission of the knowledge of the safety of 17/06/2012
31.	Protocol number 6 meeting of the commission of the knowledge of the safety of 17/06/2012
32.	Protocol number 7 meeting of the commission of the knowledge of the safety of 17/06/2012
33.	Protocol number 8 meeting of the commission of the knowledge of the safety of 17/06/2012
34.	Protocol number 9 meeting of the commission of the knowledge of the safety of 17/06/2012
35.	Protocol number 10 meeting of the commission of the knowledge of the safety of 17/06/2012
36.	Protocol number 11 meeting of the commission of the knowledge of the safety of 17/06/2012
37.	Protocol number 12 meeting of the commission of the knowledge of the safety of 17/06/2012
38.	Protocol number 14 meeting of the commission of the knowledge of the safety of 17/06/2012
39.	Reference natural gas and electricity consumption of pulp drying and granulation complex in the years 2005-2011
40.	Tax invoice # 2534 dated August 26, 2008
41.	Tax invoice # 2853 dated September 25, 2008
42.	Tax invoice # 2913 dated November 28, 2008
43.	Tax invoice # 3091 dated August 26, 2009
44.	Tax invoice # 3378 dated 26 September 2009
45.	Tax invoice # 3415 dated 27 November 2009
46.	Tax invoice # 3895 dated 30 August 2010 p.

47.	Tax invoice # 4153 dated 26 September 2010
48.	Tax invoice # 4439 dated 28 November 2010
49.	Tax invoice # 4583 dated 28 August 2011
50.	Tax invoice # 4716 dated 29 September 2011
51.	Tax invoice # 4857 dated 25 November 2011
	Limited Liability Company "Lanovetskiy Sugar Plant"
52.	Passport 25080879.00001.001 PS to automated Weighting complex AVK
53.	List of measuring devices that are in operation and are subject to verification in 2012 (mechanical) Limited Liability Company "Lanovetskiy Sugar Plant"
54.	Reference of performance of pulp drying and granulation complex for 2005-2011 Limited Liability Company "Lanovetskiy Sugar Plant"
55.	Impacts on the environment "Implementation of pulp recycling on Limited Liability Company "Lanovetskiy Sugar Plant" 2004
56.	Passport of pulp drying and granulation complex № 63101
57.	Contract of sale equipment from October 2, 2008
58.	Contract of sale of real estate Limited Liability Company "Lanovetskiy Sugar Plant" from October 2, 2008
59.	Acceptance act on the object of sale from October 2, 2008
60.	Acceptance act to the agreement of sale equipment from October 2, 2008
61.	Acceptance act of the works of calibration of measuring instruments on August 31, 2011 SE "Ternopilstandardmetrologia"
62.	Resolution number 10/01 on waste disposal in 2005 dated 29.06.2004
63.	Resolution number 10/01 on waste disposal in 2006 dated 23.06.2005
64.	Resolution number 10/01 on waste disposal in 2007 dated 20.04.2006
65.	Resolution number 10/01 on waste disposal in 2008 dated 14.06.2007
66.	Resolution number 10/01 on waste disposal in 2009 dated 16.06.2008
67.	Resolution number 10/01 on waste disposal in 2010 dated 15.06.2009
68.	Resolution number 10/01 on waste disposal in 2011 dated 08.06.2010
69.	Resolution № 61238110100-3 of the emission of pollutants into the air from stationary sources dated 06.05.2009.

70.	Form # 2 tp-air “Report on atmospheric air protection” for 2005
71.	Form # 2 tp-air “Report on atmospheric air protection” for 2006
72.	Form # 2 tp-air “Report on atmospheric air protection” for 2007
73.	Form # 2 tp-air “Report on atmospheric air protection” for 2008
74.	Form # 2 tp-air “Report on atmospheric air protection” for 2009
75.	Form # 2 tp-air “Report on atmospheric air protection” for 2010
76.	Form # 2 tp-air “Report on atmospheric air protection” for 2011
77.	Logbooks of lessons on safety
78.	Extract from the Protocol № 17 dated June 10, 2011 meeting of the commission to examine the knowledge
79.	Protocol number 1 meeting of the permanent committee of the knowledge of the safety of 13 June 2012
80.	The training program on safety Limited Liability Company “Lanovetskiy Sugar Plant” dated 21.05.2012
81.	Reference of natural gas and electricity consumption pulp drying and granulation complex in the years 2005-2011
82.	Tax invoice # 2093 dated August 28, 2008
83.	Tax invoice # 2104 dated September 25, 2008
84.	Tax invoice # 2230 dated November 30, 2008
85.	Tax invoice # 2314 dated August 29, 2009
86.	Tax invoice # 2643 dated 25 September 2009
87.	Tax invoice # 2817 dated 26 November 2009
88.	Tax invoice # 2896 dated 26 August 2010
89.	Tax invoice # 2903 dated 25 September 2010
90.	Tax invoice # 3016 dated 25 November 2010
91.	Tax invoice # 3250 dated 26 August 2011
92.	Tax invoice # 3298 dated 27 September 2011
93.	Tax invoice # 3407 dated 25 November 2011
	Limited Liability Company “Borshivskiy Sugar Plant”
94.	Acceptance act of the works of calibration of measuring instruments to account number 019874 dated 13.10.2011, the SE "Ternopilstandardmetrologia"
95.	Reference of performance of pulp drying and granulation complex for 2005-2011 Limited Liability Company “Borshivskiy Sugar Plant”
96.	Passport to granulation complex OGM-1, 5, № 160532
97.	Passport of pulp drying and granulation complex № 45029
98.	Contract of purchase and sale of real estate Limited

	Liability Company “Borshivskiy Sugar Plant” from October 2, 2008
99.	Acceptance act object of sale under contract of sale of real property on October 2, 2008
100.	Agreement of purchase and sale of equipment October 2, 2008
101.	Specification number 3 to the contract of sale of real property from October 2, 2008
102.	The act of entering the equipment (pulp drying and granulation complex) dated October 10, 2002
103.	Form # 2 tp-air “Report on atmospheric air protection” for 2010
104.	Form # 2 tp-air “Report on atmospheric air protection” for 2011
105.	Resolution № 6120810100-30 on emissions of pollutants into the air from stationary sources dated 24.09.2008.
106.	Resolution number 02/01 on waste disposal dated 19.01.2009
107.	Order № 30 "On the training and certification of labor protection in enterprises"
108.	Protocol number 2 commission meeting to examine the knowledge on safety dated 24.04.2012
109.	Protocol number 3 commission meeting to examine the knowledge on safety dated 24.04.2012
110.	Thematic plan and training program for mechanics dated 23.04.2012
111.	The training program on safety for mechanics dated 23.04.2012
112.	Passport of pulp drying press GH-2 № 30.01
113.	Reference of natural gas and electricity consumption of pulp drying and granulation complex in the years 2005-2011
114.	Tax invoice # 5160 dated August 30, 2008
115.	Tax invoice # 5239 dated September 26, 2008
116.	Tax invoice # 5327 dated November 28, 2008
117.	Tax invoice # 5546 dated August 27, 2009
118.	Tax invoice # 5598 dated September 25, 2009
119.	Tax invoice # 5662 dated November 27, 2009
120.	Tax invoice # 5712dated August 27, 2010
121.	Tax invoice # 5799 dated September 28, 2010
122.	Tax invoice # 5812 dated November 26, 2010
123.	Tax invoice # 5903 dated August 25, 2011
124.	Tax invoice # 5976 dated September 25, 2011
125.	Tax invoice # 6008 dated November 30, 2011

	Limited Liability Company "Buchatskiy Sugar Plant"
126.	Reference of performance of pulp drying and granulation complex for 2005-2011 Limited Liability Company "Buchatskiy Sugar Plant"
127.	Passport of pulp drying and granulation complex № 20697
128.	Contract № 18/05-12 sales centrifuge FPN-125L-09 dated May 24, 2012
129.	Specification number 1 to the contract of sale of real property dated October 2, 2008
130.	Acceptance protocol to the agreement of sale dated October 2, 2008
131.	Logbook calibration weights (gross)
132.	Logbook calibration weights (tare)
133.	Acceptance protocol of the works of calibration of measuring instruments (weights) dated August 31, 2011 SE "Ternopilstandardmetrologia"
134.	Contract number 14TP dated April 27, 2011 at complex engineering works and supply of equipment for automation of diffusion separation
135.	Logbook teaching and testing laws, rules and regulations on labor protection, electrical safety, fire safety, occupational health and hygiene, safety and working professionals.
136.	Protocol number 4 meetings of the commission of knowledge on June 9, 2011 employees of the chief power engineers
137.	Protocol number 1 meeting of the commission of knowledge on June 9, 2011 employees of the Chief Mechanics
138.	Protocol number 10 meeting of the commission of knowledge from 31 June 2011
139.	Protocol number 5 meeting of the commission of knowledge from June 10, 2011 employees of the CHP
140.	Resolution for emissions of pollutants into the air from stationary sources dated 22.07.2010
141.	Resolution № 03/01 of 29.06.2004 on waste disposal in 2005
142.	Resolution № 03/01 of 21.06.2005 on waste disposal in 2006
143.	Resolution № 03/01 of 13.06.2006 on waste disposal in 2007
144.	Resolution № 03/01 of 01.04.2009 on waste disposal in 2009
145.	Resolution № 03/01 of 15.06.2009 on waste disposal in 2010
146.	Resolution № 03/19 of 12.08.2010 on waste disposal in

	2011
147.	Resolution № 03/01 of 07.06.2011 on waste disposal in 2012
148.	Resolution № 6121210100-19 on emissions of pollutants into the air from stationary sources dated 30.07.2010
149.	Report on Air Protection 2-TP (air) for 2005
150.	Form # 2 tp-air "Report on atmospheric air protection" for 2006
151.	Form # 2 tp-air "Report on atmospheric air protection" for 2007
152.	Form # 2 tp-air "Report on atmospheric air protection" for 2008
153.	Form # 2 tp-air "Report on atmospheric air protection" for 2009
154.	Form # 2 tp-air "Report on atmospheric air protection" for 2010
155.	Passport of pulp drying press GH-2 № 30.01
156.	Reference natural gas and electricity consumption of pulp drying and granulation complex in the years 2005-2011
157.	Tax invoice # 3350 dated August 25, 2008
158.	Tax invoice # 3408 dated September 25, 2008
159.	Tax invoice # 3491 dated November 27, 2008
160.	Tax invoice # 3581 dated August 26, 2009
161.	Tax invoice # 3616 dated September 27, 2009
162.	Tax invoice # 3708 dated November 26, 2009
163.	Tax invoice # 3853 dated August 30, 2010
164.	Tax invoice # 3897 dated September 25, 2010
165.	Tax invoice # 3972 dated November 26, 2010
166.	Tax invoice # 4226 dated August 29, 2011
167.	Tax invoice # 4308 dated September 25, 2011
168.	Tax invoice # 4405 dated November 25, 2011
	Limited Liability Company "Zbarazkiy Sugar Plant"
169.	Reference of performance of pulp drying and granulation complex for 2005-2011 Limited Liability Company "Zbarazkiy Sugar Plant"
170.	Passport 25080879.00001.001 PS to automated Weighting complex
171.	The act of transfer and acceptance of the works of calibration of measuring instruments (scales automobiles) from September 16, 2011 SE "Ternopilstandardmetrologia"
172.	Acceptance protocol to the agreement of sale equipment dated September 24, 2008

173.	Contract № 3506274_1 of installation and commissioning of equipment
174.	Resolution number 06/01 dated 13.05.2010 for waste disposal in 2011
175.	Resolution number 06/01 dated 16.06.2009, on the waste disposal in 2010
176.	Resolution № 6122410100-25 on emissions of pollutants into the air from stationary sources dated 06.08.2010
177.	Form # 2 tp-air “Report on atmospheric air protection” for 2010
178.	Minutes № 1 commission meeting to examine the knowledge of the safety of 05/25/2011, the
179.	Protocol number 10 commission meeting to examine the knowledge of the safety dated September 11, 2011
180.	Protocol number 13 commission meeting to examine the knowledge of the safety dated September 14, 2011
181.	Protocol number 14 commission meeting to examine the knowledge of the safety dated September 15, 2011
182.	Protocol number 15 commission meeting to examine the knowledge of the safety dated September 16, 2011
183.	Protocol number 2 commission meeting to examine the knowledge of the safety dated 27.05.2011
184.	Protocol number 3 commission meeting to examine the knowledge of the safety dated 03.06.2011
185.	Protocol number 4 commission meeting to examine the knowledge of the safety dated 10.06.2011
186.	Protocol number 5 commission meeting to examine the knowledge of the safety dated 17.06.2011
187.	Protocol number 6 commission meeting to examine the knowledge of the safety dated 24.06.2011
188.	Protocol number 7 commission meeting to examine the knowledge of the safety dated 04.07.2011
189.	Thematic plan for training and re-certification personnel servicing compressor, installations and vessels working under pressure
190.	Logbook of instruction on safety
191.	Tax invoice # 4543 dated August 25, 2008
192.	Tax invoice # 4597 dated September 26, 2008
193.	Tax invoice # 4637 dated November 25, 2008
194.	Tax invoice # 4638 dated November 26, 2008
195.	Tax invoice # 4751 dated August 25, 2009
196.	Tax invoice # 4802 dated September 29, 2009
197.	Tax invoice # 4872 dated November 27, 2009
198.	Tax invoice # 4905 dated August 27, 2010
199.	Tax invoice # 4985 dated September 27, 2010

200.	Tax invoice # 5018 dated November 28, 2010
201.	Tax invoice # 5019 dated November 28, 2010
202.	Tax invoice # 5264 dated August 29, 2011
203.	Tax invoice # 5340 dated September 25, 2011
204.	Tax invoice # 5409 dated November 25, 2011
205.	Tax invoice # 5411 dated November 27, 2011

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. Horianiy V.O - General Director of Limited Liability Company “Borshivskiy Sugar Plant”
2. Chernega V.M. - Head of the working group on improving the practice of recycling organic waste of Limited Liability Company “Borshivskiy Sugar Plant”
3. Zadorozhna V.M. - Chief Technologist of Limited Liability Company “Borshivskiy Sugar Plant”
4. Bondarenko M.V. - Chief power engineer of Limited Liability Company “Borshivskiy Sugar Plant”
5. Chorpita I.M. - Chemical engineer, environmentalist of Limited Liability Company “Borshivskiy Sugar Plant”
6. Pavlykivskiy I.A. - General Director of Limited Liability Company “Buchatskiy Sugar Plant”
7. Monastirskiy M.I. - Head of the working group on improving the practice of recycling organic waste of Limited Liability Company “Buchatskiy Sugar Plant”
8. Sasanchyn I.R. - Chief Technologist of Limited Liability Company “Buchatskiy Sugar Plant”
9. Yaremus I.Z. - Chief power engineer of Limited Liability Company “Buchatskiy Sugar Plant”
10. Blagiy V.R. - Head of the Department of Labor protection and Environmental of Limited Liability Company “Buchatskiy Sugar Plant”
11. Voroblevskyy B.I. - General Director of Limited Liability Company “Zbarazkiy Sugar Plant”
12. Omelchenko O.H. - Head of the working group on improving the practice of recycling organic waste of Limited Liability Company “Zbarazkiy Sugar Plant”
13. Stemkovskiy L.M. - Chief Technologist of Limited Liability Company “Zbarazkiy Sugar Plant”
14. Strilitskiy A.A. - Chief power engineer of Limited Liability Company “Zbarazkiy Sugar Plant”
15. Rogovskiy P.L. - Deputy Chief Engineer of Limited Liability Company “Zbarazkiy Sugar Plant”
16. Malyuta V.S. - General Director of Limited Liability Company “Kozivskiy Sugar Plant”
17. Buchak V.B. - Head of the working group on improving the practice of recycling organic waste of Limited Liability Company “Kozivskiy Sugar Plant”
18. Fediv N.I. - Chief Technologist of Limited Liability Company “Kozivskiy Sugar Plant”
19. Pasichnik V.V. - Chief power engineer of Limited Liability Company “Kozivskiy Sugar Plant”
20. Tatusko I.M. - Chief ecologist of Limited Liability Company “Kozivskiy Sugar Plant”
21. Kaznovetskiy V.L. - General Director of Limited Liability Company “Lanovetskiy Sugar Plant”

22. Paliyeva A.P. - Chief Technologist of Limited Liability Company “Lanovetskiy Sugar Plant”
23. Pariychuk M.G. - Chief power engineer of Limited Liability Company “Lanovetskiy Sugar Plant”
24. Kyrylchuk N.V. - Safety Engineer of Limited Liability Company “Lanovetskiy Sugar Plant”
25. Kormilo V.M. - General Director of Limited Liability Company “Khorostkivskiy Sugar Plant”
26. Pidodvirna N.I. - Chief Technologist of Limited Liability Company “Khorostkivskiy Sugar Plant”
27. Harahudz P.M. - Chief power engineer of Limited Liability Company “Khorostkivskiy Sugar Plant”
28. Fedorov M.I. - Chief ecologist of Limited Liability Company “Khorostkivskiy Sugar Plant”
29. Vasylieva N.V. - Environmental project manager of “MT-Invest Carbon” LLC

APPENDIX A: DETERMINATION PROTOCOL
BUREAU VERITAS CERTIFICATION HOLDING SAS

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?	The title of the project is: ”Implementation of technological modernization of installations with the aim of the introduction of sugar production organic waste management system for the sugar factories participating in the joint activities”.	OK	OK
-	Is the sectoral scope to which the project pertains presented?	Sectoral scope - 13.Waste recycling and utilization.	OK	OK
-	Is the current version number of the document presented?	The current version number of the document is presented. See section A.1. **CAR 01.** Please, change PDD version and date.	CAR 01	OK
-	Is the date when the document was completed presented?	The date of completeness of the current version of the project design document is indicated in the PDD section A.1.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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)?	Situation before project implementation Before the project realization, equipment and infrastructure (warehouses, adjusted logistics system) necessary to decrease moisture content in the pulp, wherefore it quickly deteriorated, and this valuable feed resource turned into organic waste, which at first was stored in pulp pits (up to three months) and then transported to landfills. When emptying the pulp pits from deteriorated pulp, 3-5% of its mass left at the pit bottom, containing a large number of microorganisms that rapidly contaminated new pulp and speeded up the pace of its deterioration. Due to the use of this practice, the pulp produced at the JI project plants could not be used for feeding cattle and was disposed at landfills. Baseline scenario In the baseline scenario in the absence of the project the situation would continue: companies would still store sugar beet pulp in pits in the substance as it was produced, with no additional actions aimed at reduction of its moisture content. After filling the pulp pits with pulp, it would be transported and disposed at landfills. This scenario foresees decomposition of organic matter with the generation of landfill gas containing greenhouse gas –methane. Sugar production is a main business activity of the sugar plants. However, other products or waste is secondary and those to which not much attention is paid. The base scenario envisaged the continuation of the pulp handling practice that used to be applied by the plants. This scenario does not require any changes to the technical process of the plant, investment and does not face any barriers.	CAR 02 CAR 03	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Project scenario Project scenario assumes installation of equipment for decreasing of moisture content in the pulp, which allows its beneficial utilization as feed for cattle, thus it is not to be disposed at landfills and methane does not release into the atmosphere in result of pulp decomposition. **CAR 02.** Please, try to fit information of A.2 into two pages. **CAR 03.** Correct numbering in the explanation of technological scheme in figure 2.		
-	Is the history of the project (incl. its JI component) briefly summarized?	The history of the project (incl. its JI component) is briefly summarized.	OK	OK
Project participants				
-	Are project participants and Party(ies) involved in the project listed?	Project participant and parties involved are listed in the Table in section A.3. of the PDD.	OK	OK
-	Is the data of the project participants presented in tabular format?	The data of the project participant are presented in due tabular format. **CAR 04.** Please, correct table numbering.	CAR 04	OK
-	Is contact information provided in Annex 1 of the PDD?	Contact information is provided in Annex 1 of the PDD. **CAR 05.** Please, adjust table format in Annex to the requirements of JI PDD form, version 01.	CAR 05 CAR 06	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 06. Please, add information to the table 2 of Annex 1 and to Section A.3.		
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Ukraine is indicated as Host Party.	OK	OK
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine	OK	OK
-	Region/State/Province etc.	Ternopil region	OK	OK
-	City/Town/Community etc.	This project is implemented within five sugar plants in the Ternopil Region of Ukraine (Limited Liability Company "Kozivskiy Sugar Plant", Limited Liability Company "Lanovetskiy Sugar Plant", Limited Liability Company "Borshivskiy Sugar Plant", Limited Liability Company "Buchatskiy Sugar Plant", Limited Liability Company "Zbarazkiy Sugar Plant"), which signed a joint activity agreement for JI project implementation. Khorostkivskiy Sugar Plant LLC coordinates this project activity.	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	Detail of the physical location is provided in Table 2 of the PDD. **CAR 07.** Please, add geographical coordinates for better identification of the project. **CAR 08.** Please, try to fit information of A.4.1.4 into one page.	CAR 07 CAR 08	OK 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?	PDD Section A.4.2 provides some relevant technical data of main equipment installed and actions to be implemented by the project as well as the project implementation schedule.	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)	Emission reductions are achieved by avoiding the generation of methane containing in the landfill gas that occurs after sugar beet pulp disposal at the landfills. After implementation of the project activity, pulp is taken under processing, which prevents its deterioration, prolongs its shelf life as a food for livestock, which could allow its being transported to long distances for the consumer. **CAR 09.** Please, try to fit information of A.4.3 into one page.	CAR 09	OK
-	Is it provided the estimation of emission reductions over the crediting period?	The estimation of emission reductions over the crediting period is provided.	OK	OK
-	Is it provided the estimated annual reduction for the chosen credit period in tCO_2e?	The estimated annual reduction for the chosen credit period is provided in tCO_2e.	OK	OK
-	Are the data from questions above presented in tabular format?	The data from questions above are presented in tabular format. Refer to Tables in section A.4.3.1.	OK	OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	The length of crediting period is indicated in the PDD section A.4.3.1.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent provided?	Total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent are provided in accordance with the calculated values in the spreadsheet provided to the verifier.	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	**CAR 10.** Letter of Approval by the Parties involved was not provided.	CAR 10	Pending
19	Does the PDD identify at least the host Party as a "Party involved"?	Host Party involved is the Ukraine.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	According to the adopted procedure, the LoAs by Parties involved will be issued after the project determination.	Pending	Pending
20	Are all the written project approvals by Parties involved unconditional?	According to the adopted procedure, the LoAs by Parties involved will be issued after the project determination.	Pending	Pending
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?	Party involved 1: Ukraine (host Party), legal entities are Khorostkivskiy Sugar Plant LLC. Party involved 2: The Netherlands, legal entities are United Carbon Finance Ltd.	OK	OK
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the	The baseline scenario was chosen based on project-specific approach in accordance with paragraph 9(a) of the JISC	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	baseline? − JI specific approach − Approved CDM methodology approach	Guidance on Criteria for Baseline Setting and Monitoring".		
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	The theoretical description is provided in the PDD.	OK	OK
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance? − 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?	The PDD provides justification that the baseline is established by listing and describing plausible future scenarios on the basis of conservative assumption and selecting the most plausible one.	OK	OK
24	If selected elements or combinations of	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	N/A	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 methodology used?	N/A	N/A	N/A
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)?	N/A	N/A	N/A
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	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?	N/A	N/A	N/A
26 (d)	Is the baseline identified appropriately as a result?	N/A	N/A	N/A
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is	The PDD section B.2 includes analysis of project additionality and is intended to demonstrate that the project	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".	scenario is not part of the identified baseline scenario and that the project will lead to reductions of GHG emissions in comparison to the baseline. The analysis is performed based on the latest version (version 04.0.0) of the Combined tool to identify the baseline scenario and demonstrate additionality approved by CDM Executive Council and accordingly may be fully applied to Joint Implementation Projects.		
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	See section 22 of this table.	OK	OK
29 (b)	Are additionality proofs provided?	The additionality of the project activity is demonstrated and assessed with using the "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 04.0.0). To demonstrate of additionality applied: - Identification of alternatives to the project activity consistent with current laws and regulations; - Investment analysis; - Barrier analysis;	CAR 11 CAR 12 CL 01	OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		- Common practice analysis. The mentioned approach of JI leads to the conclusion that the project activity is additional. **CAR 11.** PDD has to demonstrate that providing a loan or other financial decisions were made taking into account CDM incentive. **CAR 12.** The data indicated in the table 8 is not a country risk premium, but reflects the size of cumulative risk premium, including risk premium for equity. Correct numbers from your source should be indicated. **CL 01.** Please, explain in more detail, why financing could not be attracted for realization of this project by the enterprise itself.		
29 (c)	Is the additionality demonstrated appropriately as a result?	Yes, the additionality demonstrated appropriately as a result	OK	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	Yes. See section B.2 of the PDD.	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?	N/A	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?	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
31 (c)	Are all explanations, descriptions and analyses with regard to additionality made in accordance with the selected methodology?	N/A	N/A	N/A
31 (d)	Are additionality proofs provided?	N/A	N/A	N/A
31 (e)	Is the additionality demonstrated appropriately as a result?	N/A	N/A	N/A
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 project's spatial boundaries are defined in the PDD. See section B.3.	OK	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?	See section 32 (a) of this table.	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?	The delineation of the project boundary and the gases and sources included described in the PDD by using figure.	OK	OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	All gases and sources included are explicitly stated; refer to 32 (a) above. All exclusions made are appropriate as a conservative or logic assumption.	OK	OK
Approved CDM methodology approach only				
33	Is the project boundary defined in accordance with the approved CDM methodology?	N/A	N/A	N/A
Crediting period				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began, and the starting date is 19/01/2004. **CAR 13.** Please, indicate project starting and ending dates in Section C.2.	CAR 13	OK
34 (a)	Is the starting date after the beginning of 2000?	Refer to 34 (a).	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	Operational lifetime is defined as 25 years (300 months).	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	PDD state the length of the crediting period in years and months.	OK	OK
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	Yes. The starting date of the crediting period is after the date of the first emission reductions.	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?	Yes. According to the PDD the crediting period for issuance of ERUs does not extend beyond operational lifetime of the project.	OK	OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	The estimated emission reductions are provided in the table of the PDD section A.4.3.1.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Monitoring plan		
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	It is explicitly indicated that a JI specific approach is chosen.	OK	OK
		JI specific approach only		
36 (a)	Does the monitoring plan describe: − All relevant factors and key characteristics that will be monitored? − The period in which they will be monitored? − All decisive factors for the control and reporting of project performance?	The monitoring plan describes: - data to be monitored: amount of sugar plant waste (pulp), which were not sold and were disposed to the landfill, amount of sugar plant waste (pulp), which would be disposed at the landfill. - the period in which they will be monitored: monthly; - all decisive factors for the control and reporting of project performance: statistics forms; quality control (QC) and quality assurance (QA) procedures; the operational and management structure that will be applied in implementing the monitoring plan.	OK	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	The monitoring plan specifies variables used. It provides transparent picture of the emission reductions. **CAR 14.** Please, indicate pages and tables of the IPCC 2006, that the values of parameters were sourced from.	CAR 14	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	The default values originate from recognized sources and are presented in a transparent manner. **CL 02.** Please, provide the document referenced in links 27.	CL 02 CL 03	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	analyses providing reasonable confidence levels? − Are the default values presented in a transparent manner?	**CL 03.** Please, justify the calculations of references “23” and “24”, and provide evidences of natural gas and electricity consumption of beetroot pulp dryers. Which document limits emissions to “2000”, below of which the source can be neglected?		
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	The monitoring plan indicates how the values are to be selected and justified.	OK	OK
36 (b) (ii)	For other values, − Does the monitoring plan clearly indicate the precise references from which these values are taken? − Is the conservativeness of the values provided justified?	The monitoring plan indicate the precise references from which these values are taken. The conservativeness of the values is justified.	OK	OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	See section D of the PDD.	OK	OK
36 (b) (iv)	Are International System Unit (SI units) used?	SI units are used. Also there are data units used in accordance with the applied JI specific approach.	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?	See section B.1 of the PDD.	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	There is consistency between parameters, coefficients, variables, etc. used in baseline and monitoring plan.	OK	OK
36 (c)	Does the monitoring plan draw on the list of	The monitoring plan draws on the list of standard variables	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	contained in appendix B of "Guidance on criteria for baseline setting and monitoring".		
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	See the PDD section D.1. The data and parameters that are monitored throughout the crediting period are clearly indicated in the PDD (section D.1).	OK	OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	In the table of the PDD section D.1.1 the time of monitoring (frequency) and the source of data to be used are indicated for all the monitored parameters and data.	OK	OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	All algorithms and formulae used for the estimation of baseline and project emissions are indicated and explained in the PDD.	OK	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	The underlying rationale for the algorithms/formulae is explained.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts etc. are used.	OK	OK
36 (f) (iii)	Are all equations numbered?	Yes.	OK	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?	The conservativeness of the algorithms/procedure is indicated in the PDD.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Uncertainty level of data is indicated in the table of Quality control and quality assurance (QA) procedures undertaken for the data monitored (see section D.2 of the PDD).	OK	OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	There is consistency between the elaboration on the baseline scenario and calculating the baseline emission in the monitoring plan and on spreadsheet.	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	The formulae used in the PDD are sufficiently described.	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Relevant national and/or sectoral policies and circumstances are taken into account in the project.	OK	OK
36 (f) (vii)	Are references provided as necessary?	**CAR 15.** Please, provide exact reference to the document (reference 1). **CAR 16.** Please, change reference numbering.	CAR 15 CAR 16	OK OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All key assumptions are explained in a transparent manner if needed.	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and	See section 36 (f) (v) of this table.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?			
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?	See section 36 (f) (v) of this table.	OK	OK
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	Relevant national and/or sectoral policies and circumstances are taken into account while developing the monitoring plan for this project.	OK	OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	See section D of the PDD.	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?	Uncertainty level of data is indicated in the table of Quality control and quality assurance (QA) procedures undertaken for the data monitored. Information on calibration procedures were checked during site-visit and found satisfactory. **CAR 17.** Please, add to PDD more detailed information about monitoring equipment.	CAR 17	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Khorostkivskiy Sugar Plant LLC coordinates the joint activity. Sugar plant management headed by the Director will be responsible for performance monitoring, data collection,	CAR 18	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		registration, visualization, archiving of monitoring data, and periodic inspection of measuring devices. **CAR 18.** Please, add more detailed information about responsible people to Section D.4.		
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Monitoring techniques are in line with current operation routines at the enterprise.	OK	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	Yes. See section D of PDD	OK	OK
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	Data monitored and required for emission reductions calculation and verification, according to paragraph 37 of the JI guidelines, are to be kept for two years after the last transfer of ERUs for the project.	OK	OK
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	See section D of the PDD.	OK	OK
Approved CDM methodology approach only				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
38 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	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)?	N/A	N/A	N/A
38 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	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?	N/A	N/A	N/A
38 (d)	Is the monitoring plan established appropriately as a result?	N/A	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: (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	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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 expected.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	See the section 40 (a) of this table.	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?	N/A	N/A	N/A
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	Assessment of emissions in the baseline scenario and in the project scenario is chosen.	OK	OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of:	PDD provides ex ante estimates of: (a) Emissions for the project scenario (Section E.1);	CL 04	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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?	(b) No leakages are expected; (c) Emissions for the baseline scenario (Section E.4); (d) Emission reductions adjusted by leakage (Section E). **CL 04.** Explain in more detail why project emissions starting from 2005 and in the crediting period are taken equal to zero.		
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?	N/A	N/A	N/A
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD?	(a) Estimates in 43 are given on the periodic basis, from the beginning until the end of the crediting period, in tones of CO_2 equivalent, on a source-by-source basis, for each GHG. (b) The formulae used in PDD are consistent. (c) Key factors influencing the baseline emissions and the activity level of the project and the project emissions are taken into account, as appropriate. (d) Data sources used for calculating the estimates are clearly identified, reliable and transparent. (e) Default values are taken from identified sources. (f) Estimation in 43 is based on conservative assumptions and the most plausible scenario in a transparent manner. (g) Estimates in 43 are consistent throughout the PDD. The annual average of estimated emission reductions calculated by dividing the total estimated emission reductions over the crediting period by the total months of	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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 crediting period and multiplying by twelve?	the crediting period and multiplying by twelve.		
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	Illustrative ex-ante estimation of emission reduction is made on the excel spreadsheet.	OK	OK
Approved CDM methodology approach only				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	N/A	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 by twelve?	N/A	N/A	N/A
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on	Yes. For more detailed information, please, see section F.1	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	of the PDD.		
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	The full scope EIA in accordance with the Ukrainian legislation has been conducted for each of the sugar plants attributed to the proposed project. In general, the environmental impact of the project activity implementation is positive. Changing the methods of waste management reduces pollution of groundwater with products of pulp decomposition during its storage at the landfills that also significantly effects on the conditions for the growth of pathogenic flora that may also spread through groundwater. In addition, less amount of pulp anaerobic fermentation products release into the atmosphere, not only methane that in toxicology is classified as industrial poison, but also ammonia, hydrogen sulfide and carbon monoxide. Implementation of the project activity also has a positive social impact through removing of the concentrated odor coming from pulp pits and improving working conditions at sugar plants. Since most of the farms are located in rural areas, where the use of well water is widespread, the reduction of groundwater pollution has positive effects on health of locals. No transboundary effects are not identified. Impacts that occur in any other country, and caused by the implementation of this project physically. **CAR 19.** Please, add to section F.2 the information about environmental statistical reporting.	CAR 19 CAR 20 CL 05 CL 06 CL 07 CL 08 CL 09 CL 10	OK OK OK OK OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 20. Please, correct the reference to "Instruction on procedure of calculation and payment for environmental pollution tax # 162 approved by the Ministry of Environmental Protection and Nuclear Safety of Ukraine and State Tax Administration of Ukraine dated 19/07/99" which currently became invalid. **CL 05.** Please, clarify the impact on environment of the waters after beetroot pulp pressing. **CL 06.** Please, provide statistical form 1–dangerous waste for 2005-2011p (annual) for all the 5 enterprises, involved in the project activity. **CL 07.** Please, explain why the limits were exceeded in: - Limited Liability Company "Zbarazkiy Sugar Plant" limit for 2010 – 200000 t beetroot pulp, while in Excel-table it is 216000 t, 10000 t molasses, in the table 10800 t) - Limited Liability Company "Buchatskiy Sugar Plant" limit for 2009 – 60000 t beetroot pulp, while in Excel-table it is 80000 t, in the limit molasses is absent, table 3500 t in 2010 – 60000 t beetroot pulp, while in Excel-table it is 10400 t, in the limit molasses is absent, table 4290 t in 2011– 60000 t beetroot pulp, while in Excel-table it is		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		128000 t, in the limit molasses is absent, table 5120 t in 2012 – 60000 t beetroot pulp, while in Excel-table it is152000 т, in the limit molasses is absent, table 5700 t - Limited Liability Company “Borshivskiy Sugar Plant” Limits for 2010 - 6000 t molasses in the table 6300 t. - Limited Liability Company “Kozivskiy Sugar Plant” Limits for 2009 - 20000 t beetroot pulp, while in Excel-table it is 132000 t, molasses 5481 tin the table it is 5600 t. **CL 08.** Please, clarify why in the Allowances and Limits for waste formation and disposal for 2005, 2006, 2007 at Limited Liability Company “Buchatskiy Sugar Plant” beetroot pulp waste and molasses are absent, while you can see them in the calculation model? **CL 09.** Please, clarify why in the Allowances and Limits for waste formation and disposal for 2005, 2006, 2007, 2008 at Limited Liability Company “Lanovetskiy Sugar Plant” beetroot pulp waste and molasses are absent, while you can see them in the calculation model? **CL 10.** Please, clarify where and by whom waste beetroot pulp and molasses are utilized. In accordance with limits they are transferred to another owner for utilization Limited Liability Company “Kozivskiy Sugar Plant””, Limited Liability Company “Buchatskiy Sugar Plant”, Limited Liability Company “Zbarazkiy Sugar Plant”.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Stakeholder consultation				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	No stakeholder consultation process for the JI projects is required by the Host Party. Stakeholder comments will be collected during the time of PDD publication in the internet during the determination procedure. **CL 11.** Please, provide information about support to the project by central and regional authorities.	CL 11	OK
Determination regarding small-scale projects (additional elements for assessment)_Paragraphs 50 - 57_Not applicable				
Determination regarding land use, land-use change and forestry projects _Paragraphs 58 – 64(d)_Not applicable				
Determination regarding programmes of activities_Paragraphs 66 – 73_Not applicable				

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
CAR 01. Please, change PDD version and date.	-	PDD version and date were corrected. Please, see updated PDD version 2.1.	Due to the amendments made in the PDD, CAR 01 is closed.
CAR 02. Please, try to fit information of A.2 into two pages.	-	The required changes were made to PDD version 2.1. Size of Section A.2 does not exceed two pages.	The PDD has been corrected. CAR 02 is closed.
CAR 03. Correct numbering in the explanation of technological scheme in figure 2.	-	Table numbering was corrected in PDD version 2.1.	Necessary corrections have been made. The issue is closed.
CAR 04. Please, correct table numbering.	-	Table numbering was corrected in PDD version 2.1.	Necessary corrections have been made. The issue is closed.
CAR 05. Please, adjust table format in Annex to the requirements of JI PDD form, version 01.	-	In PDD version 2.1 table format of the table in the Annex 1 was adjusted to requirements of JI PDD form, version 01	The PDD has been corrected. CAR 05 is closed.

CAR 06. Please, add information to the table 2 of Annex 1 and to Section A.3.	-	The required changes were made to PDD version 2.1.	The PDD has been corrected. CAR 06 is closed.
CAR 07. Please, add geographical coordinates for better identification of the project.	-	Geographical coordinates were added. Please, see the updated version of PDD 2.1.	Necessary corrections have been made. The issue is closed.
CAR 08. Please, try to fit information of A.4.1.4 into one page.	-	Section A.4.1.4 was shortened to one page in PDD version 2.1.	Necessary corrections have been made. The issue is closed.
CAR 09. Please, try to fit information of A.4.3 into one page.	-	The required changes were made to PDD version 2.1. Size of Section A.4.3 does not exceed one page.	Necessary corrections have been made, CAR 09 is closed.
CAR 10. Letter of Approval by the Parties involved was not provided.	19	Positive determination opinion is a prerequisite for LoA application. LoA will be provided immediately upon receipt.	Pending.

CAR 11. PDD has to demonstrate that providing a loan or other financial decisions were made taking into account CDM incentive.	29 (b)	The following text was add to PDD version 2.1: «JI incentive was taken into account was taken into account while decision-making about the launch of the project. Below the influence of economic conditions on the decision regarding the implementation of alternatives to the project activity is considered.». Evidence was provided to AIE.	Based on the document received, CAR 11 is closed.
CAR 12. The data indicated in the table 8 is not a country risk premium, but reflects the size of cumulative risk premium, including risk premium for equity. Correct numbers from your source should be indicated.	29 (b)	Table 8 was changed accordingly (its number was changed to 10).	The PDD has been corrected. CAR 12 is closed.

CL 01. Please, explain in more detail, why financing could not be attracted for realization of this project by the enterprise itself.	29 (b)	The Enterprises, involved in the project activity, were not able to attract more financing due to their bad economic situation under conditions of economic crisis of Ukrainian sugar industry. In order to get bank loan the positive credit history, evidences of stable profitable operation are required, which was not feasible at the time of decision making about the project.	Based on the explanation received, CL 01 is closed.
CAR 13. Please, indicate project starting and ending dates in Section C.2.	34 (a)	Project starting and ending dates were added to Section C.2. Please, see the updated version of PDD 2.1.	The PDD has been corrected. CAR 13 is closed.
CAR 14. Please, indicate pages and tables of the IPCC 2006, that the values of parameters were sourced from.	36 (b)	IPCC 2006 table and page numbers, from where the applied parameters were sourced, were added to PDD version 2.1.	The PDD has been corrected. CAR 14 is closed.

CL 02. Please, provide the document referenced in links 27.	36 (b)	The document is currently unavailable. Calculation formulae 2 and 4 were adjusted to recommended calculation methodologies of IPCC 2006. Also, similar approach is applied in National Inventory Report of Ukraine for 1990-2010. Please, see formulae on the pages 287-288. Please, see the updated version of PDD 2.1.	Based on the explanation received, CL 02 is closed.

CL 03. Please, justify the calculations of references “23” and “24”, and provide evidences of natural gas and electricity consumption of beetroot pulp dryers. Which document limits emissions to “2000”, below of which the source can be neglected?	36 (b)	In accordance with notes on consumption of natural gas and electricity by beetroot pulp dryers, maximal energy consumption happened at LLC “Lanivtsi Sugar Plant” in 2011. Natural gas consumption amounted 822 $t.m^3$, leading to emissions of 1560 tonnes of CO_2. Maximal electricity consumption was 587 MWh, leading to emissions of 720 tonnes of CO_2. In accordance with paragraph 14 of Guidance on criteria for baseline setting and monitoring list of emission sources should include sources emissions from which exceed 2000 tonnes CO_2 or 1% of annual emissions whichever is lower. The above mentioned emission sources does not exceed this quantity and can be neglected.	Based on the explanation received, CL 03 is closed.

CAR 15. Please, provide exact reference to the document (reference 1).	36 (f) (vii)	The exact link to the document was added: http://www.uazakon.com/big/text78/pg6.htm Please, see the updated version of PDD 2.1.	The PDD has been corrected. CAR 15 is closed.
CAR 16. Please, change reference numbering.	36 (f) (vii)	Reference numbering was corrected. Please, see updated PDD version 2.1.	The PDD has been corrected. CAR 16 is closed.
CAR 17. Please, add to PDD more detailed information about monitoring equipment.	36 (i)	More detailed information about monitoring equipment was added to PDD version 2.1.	Necessary corrections have been made, CAR 17 is closed.
CAR 18. Please, add more detailed information about responsible people to Section D.4.	36 (j)	More detailed information about responsible people was added to Section D.4 Please, see the updated version of PDD 2.1.	Necessary corrections have been made, CAR 18 is closed.

CL 04. Explain in more detail why project emissions starting from 2005 and in the crediting period are taken equal to zero.	43	The only emission source in the project scenario is emissions of methane due to organic waste decay, which are proportional to quantity of sugar production waste (beetroot pulp), which were not realized and were taken to landfill. PDD contains preliminary estimate of emissions both in project and baseline, which is based on actual (2005-2011) and expected (2012-2019) data on quantity of sugar production waste (beetroot pulp), which were not realized and were taken to landfill. Based on 2005-2011 data this parameter was equal to zero. Consequently the corresponding assumption was made that the tendency will be maintained during next periods. In order to assure accuracy, quantity of sugar production waste (beetroot pulp), which were not realized and were taken to landfill is included to the list of monitored parameters, thus, actual emissions will be determined based on monitoring results.	Based on the explanation received, CL 04 is closed.

CAR 19. Please, add to section F.2 the information about environmental statistical reporting.	48 (b)	Statistical reporting on environmental impacts of the enterprises is performed by filling in the following statistical forms: # 2 tp-air “Report on atmospheric air protection”; # 1-waste “Waste treatment”; # 1-VT “Report on waste and package”; # 2-TP (vodgosp) "Report on the use of water". This information was added to SectionF2. Please, see the updated version of PDD 2.1.	The PDD has been corrected. CAR 19 is closed.

CAR 20. Please, correct the reference to "Instruction on procedure of calculation and payment for environmental pollution tax # 162 approved by the Ministry of Environmental Protection and Nuclear Safety of Ukraine and State Tax Administration of Ukraine dated 19/07/99" which currently became invalid.	48 (b)	Because of the fact that at the time of decision making about the project this Instruction was in force, its referencing is valid and therefore was not corrected. Instead it was made more accurate in the following way: "In accordance with Instruction on procedure of calculation and payment for environmental pollution tax # 162 approved by the Ministry of Environmental Protection and Nuclear Safety of Ukraine and State Tax Administration of Ukraine dated 19/07/99 with changes and amendments adopted by the Order of Ministry of Environmental Protection and Nuclear Safety of Ukraine # 24/37 dated 27/01/2000, which was in force at the time of decision making about project implementation, in case of overlimiting waste disposal the fine is paid a five times the amount of the fee for waste disposal".	Based on the explanation received, CAR 20 is closed.

CL 05. Please, clarify the impact on environment of the waters after beetroot pulp pressing.	48 (b)	Enterprises which have beetroot pulp presses installed, in particular LLC “Borshchiv Sugar Plant” and LLC “Buchach Sugar Plant”, the schemes of press waters return into the sugar production cycle are in place. The waters are directed into diffusion apparatus. This allows reducing process water consumption, cut sugar loss with the beetroot pulp and avoid negative environmental impact of sewage waters.	Based on the explanation received, CL 05 is closed.

CL 06. Please, provide statistical form 1–dangerous waste for 2005-2011p (annual) for all the 5 enterprises, involved in the project activity.	48 (b)	Response #1 The Enterprises, involved in the project activity does not report by the form of statistical reporting # 1-dangerous waste “Report on occurrence, treatment and utilization of I-III danger class waste”. Beetroot pulp is IV danger class waste. Response #2 Information in section F.2 was corrected in accordance with the actual situation.	Conclusion on response #1 Please, provide form of statistical reporting # 1-dangerous waste for 2005-2011 (annual). Form 1-VT"Report on waste and package materials" for 2009-2011. These forms are filled at the Enterprises (see. sectionF.2). Conclusion on response #2 Due to the amendments made in the PDD, CL 06 is closed.

CL 07. Please, explain why the limits were exceeded in: - Limited Liability Company “Zbarazkiy Sugar Plant” limit for 2010 – 200000 t beetroot pulp, while in Excel-table it is 216000 t, 10000 t molasses, in the table 10800 t) - Limited Liability Company “Buchatskiy Sugar Plant” limit for 2009 – 60000 t beetroot pulp, while in Excel-table it is 80000 t, in the limit molasses is absent, table 3500 t in 2010 – 60000 t beetroot pulp, while in Excel-table it is 10400 t, in the limit molasses is absent, table 4290 t in 2011– 60000 t beetroot pulp, while in Excel-table it is 128000 t, in the limit molasses is absent, table 5120 t in 2012 – 60000 t beetroot pulp, while in Excel-table it is152000 т, in the limit molasses is absent, table 5700 t - Limited Liability Company “Borshivskiy Sugar Plant” Limits for 2010 - 6000 t molasses in the table 6300 t. - Limited Liability Company “Kozivskiy Sugar Plant” Limits for 2009 - 20000 t beetroot pulp, while in Excel-table it is 132000 t, molasses 5481 tin the table it is 5600 t.	48 (b)	Response #1 Overlimiting happened due to increase in available raw materials for sugar production in comparison to its planned quantity a year in advance to the beginning of operations, when the limit was approved. The Enterprises are interested in processing maximum possible quantity of sugarbeet roots during the season (within the capacity of the plant), since this increases revenues of the production. Losses due to increase of payments for overlimiting of waste disposal are not significant compared to volume of additional income from sugar sale. Thus, absence of the limit is not restriction for enterprise operation and consequently for its waste formation and disposal, but is only causes additional insignificant expenses. In accordance with “Procedure to determine norms for environmental pollution payments and collection of these payments”, approved by the Cabinet of Ministers Resolution as of 1/03/1999 p. No. 303 (became invalid on 27/12/2010)	Conclusion on response #1 Please, provide accounting documents (payments) for overlimiting waste production in the mentioned types of waste.

		«In case the duty payer misses the properly approved limits for waste discharge and disposal, or overlimiting has occurred the payment is calculated in line with the approved procedure in tenfold size" (paragraph 8), which is collected from the income of the enterprise (paragraph 12). When transition to environmental taxes took places starting in 2011, tax due is calculated based on tax rate per tonne of waste using formulae on the page 249 of Tax Code. Paragraph about tenfold payments for waste disposal overlimiting became invalid. Besides, since the limits were approved in the time when the project activity was already implemented, the limits were prepared just in case the installed project equipment brakes, and beetroot pulp would have to be transported to landfill. There were no intensions to dispose molasses at landfills at the enterprises questioned.	

		Response #2 Documents with payments for overlimiting waste production can not be provided, because overlimiting did not happened. Due to realization of the project activity, the enterprises direct their beetroot pulp to utilization at agricultural farms and it does not have to be disposed at landfill. Above the hypothetical situation is described if the beetroot pulp dryersbrake, or it is not accepted by farmers to use as cattle fodder.	Conclusion on response #2 Based on the explanation received, CL 07 is closed.

CL 08. Please, clarify why in the Allowances and Limits for waste formation and disposal for 2005, 2006, 2007 at Limited Liability Company “Buchatskiy Sugar Plant” beetroot pulp waste and molasses are absent, while you can see them in the calculation model?	48 (b)	Response #1 LLC «Buchach-sugar» was not going to dispose waste beetroot pulp and molasses at landfills, instead it used it in accordance with the project activity. Response #2 See answer to the CL above.	Conclusion on response #1 Please, explain, why waste beetroot pulp and molasses are not included to the limits? In accordance with environmental legislation, waste which was not described in limits are not allowed to occur. Conclusion on response #2 Based on the explanation received, CL 08 is closed.

CL 09. Please, clarify why in the Allowances and Limits for waste formation and disposal for 2005, 2006, 2007, 2008 at Limited Liability Company “Lanovetskiy Sugar Plant” beetroot pulp waste and molasses are absent, while you can see them in the calculation model?	48 (b)	Response #1 LLC «Lanivtsi-sugar» was not going to dispose waste beetroot pulp and molasses at landfills, instead it used it in accordance with the project activity. Response #2 See answer to the CL above.	Conclusion on response #1 Please, explain, why waste beetroot pulp and molasses are not included to the limits? In accordance with environmental legislation, waste which was not described in limits are not allowed to occur. Conclusion on response #2 Based on the explanation received, CL 09 is closed.

CL 10. Please, clarify where and by whom waste beetroot pulp and molasses are utilized. In accordance with limits they are transferred to another owner for utilization Limited Liability Company “Kozivskiy Sugar Plant””, Limited Liability Company “Buchatskiy Sugar Plant”, Limited Liability Company “Zbarazkiy Sugar Plant”.	48 (b)	Response #1 “The other owner”, mentioned in the limit for waste formation and disposal, can be any enterprise or private entity, which is not a sugar plant – the owner of the limit. Including agricultural enterprises, that accepted beetroot pulp for cattle feeding. Examples of the documents which prove acceptance and transfer of beetroot pulp, were provided. Response #2 LLC “Koziv Sugar Plant” sends beetroot pulp for utilization to: LLC «Kargo» and LLC «Mriya-Podillya». LLC “Buchach Sugar Plant” sends beetroot pulp for utilization to: LLC“Mriya-Pidgaytsi”, LLC “Lemkivska Mriya”,LLC“Mriya-Podillya”. LLC “Zbarazh Sugar Plant” sends beetroot pulp for utilization to: LLC: “Novargis” and LLC “Mriya-Podillya”. Supporting documents are the expenditure orders, copies of which were provided.	Conclusion on response #1 Please, provide contract for utilization of waste beetroot pulp and molasses. Conclusion on response #2 Based on the document received, CL 10 is closed.

CL 11. Please, provide information about support to the project by central and regional authorities.	49	The project is related to internal production processes, as a result of changing which the negative impact on environment of the enterprises involved in the project activity, was reduced. This happened by cutting the quantity of waste directed to landfills. There was no special need to get approval from regional or central authority bodies during realization of the project. Since the environmental impact of the project realization is totally positive, there is no reasons for negative attitude to the project of regional or central authority bodies.	Based on the explanation received, CL 11 is closed.