



DETERMINATION REPORT CEP CARBON EMISSIONS PARTNERS S.A.

DETERMINATION OF THE
Reduction of CO₂ emissions by systematic
utilization of No-till technology at Ltd
“Obriy-MTS-Rozdylna” farmlands

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DETERMINATION REPORT

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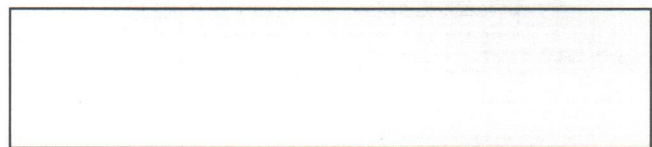
Summary:
Bureau Veritas Certification has made the determination of the "Reduction of CO₂ emissions by systematic utilization of No-till technology at Ltd "Obriy-MTS-Rozdylna" farmlands" project of CEP CARBON EMISSIONS PARTNERS S.A. located in Rozdilianskyi district of Odesa region, Ukraine on the basis 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 Actions 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.: URKAINE-det/0536/2012	Subject Group: JI
Project title: Reduction of CO ₂ emissions by systematic utilization of No-till technology at Ltd "Obriy-MTS-Rozdylna" farmlands	
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Work reviewed by: Ivan Sokolov - Internal Technical Reviewer	
Work approved by: Ivan Sokolov - Operational Manager	
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1 INTRODUCTION

CEP CARBON EMISSIONS PARTNERS S.A. has commissioned Bureau Veritas Certification to determine its JI project “Reduction of CO₂ emissions by systematic utilization of No-till technology at Ltd “Obriy-MTS-Rozdylna” farmlands” (hereafter called “the project”) in Rozdilianskyi district of Odesa 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 emissions reductions units (ERUs).

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

1.2 Scope

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

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

1.3 Determination team

The determination team consists of the following personnel:

Oleg Skoblyk

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier



Kateryna Zinevych

Bureau Veritas Certification Team Member, Climate Change Lead Verifier

Denys Pishchalov

Bureau Veritas Certification Team Member, 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 CEP CARBON EMISSIONS PARTNERS S.A. 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, 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, CEP CARBON EMISSIONS PARTNERS S.A. revised the PDD version



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01 dated July 13, 2012 and resubmitted it on August 20, 2012 as version 02.

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

2.2 Follow-up Interviews

On 18/08/2012 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 Ltd “Obriy-MTS-Rozdylna” and CEP CARBON EMISSIONS PARTNERS S.A. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Ltd “Obriy-MTS-Rozdylna”	<ul style="list-style-type: none"> ➤ Project History ➤ Project approach ➤ Project boundary ➤ Schedule of implementation ➤ Organizational Structure ➤ Responsibilities and obligations ➤ Training ➤ Quality control procedures and technologies ➤ Modernization / installation of equipment (records) ➤ Control over metering equipment ➤ The system of keeping records of measurements, the database ➤ Technical Documentation ➤ Monitoring Plan and procedures ➤ Permits and licenses ➤ Environmental Impact Assessment ➤ Answers of stakeholders
CEP CARBON EMISSIONS PARTNERS S.A..	<ul style="list-style-type: none"> ➤ Baseline methodology ➤ Monitoring Plan ➤ Additionality proofs ➤ The calculations of emission reductions ➤ Project design ➤ Legal issues relating to the project ➤ Environmental Impacts ➤ Approval of the host party



2.3 Resolution of Clarification and Corrective Action Requests

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

Corrective Action Request (CAR) is issued, where:

- (a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- (b) The JI requirements have not been met;
- (c) There is a risk that emission reductions cannot be monitored or calculated.

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

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

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

3 PROJECT DESCRIPTION

The purpose of the Joint Implementation (JI) Project is to reduce anthropogenic greenhouse gas (GHG) emissions resulting from agricultural activities by changing the agricultural land management system, namely replacement of traditional soil tillage in agriculture with No-till technology. Emissions are reduced due to lower carbon dioxide emissions from farmland by reducing (almost zero) topsoil disturbance by tillage in the course of crops growing.

Ltd “Obriy-MTS-Rozdylna”, established in 2005, is engaged in agricultural activity in the southern part of Ukraine. Among company’s advantages are favourable location, farmlands proximity to grain elevators as well as to the Odesa Sea Port.

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The company's primary activity is growing, processing, storage and sale of agricultural products.

Prior to the project, Ltd "Obriy-MTS-Rozdylna" used traditional land cultivation system. This system involves tillage that provides for turning over of topsoil to create homogeneous and mellow seedbed. The basic operation causing CO₂ emissions is ploughing during which crop residues are buried in the soil and weeds are removed.

In 2008, the Farm started to grow crops applying No-till technology (also referred to as "direct sowing technology"). This technology differs from the traditional technology because it provides for fewer technological procedures, which prevents the topsoil from a major disturbance, and it also differs with the way to utilize plant residues. The number of technological procedures of plant growing and harvesting is almost the same in the two technologies. The main difference is that the traditional technology provides for the processes of fertilizer application, land ploughing, cultivation, furrowing and seeding (multiple passage of the machinery in the field) direct sowing provides for simultaneous fertilizer application and sowing (single passage of the machinery). The lower number of technological procedures in No-till provides for up to 60% lower fuel consumption in internal combustion engines of tractors and other agricultural machinery.

In 2006, the Farm started purchases of necessary agricultural equipment for No-till farming as part of the Joint Implementation Project. The equipment package included:

- seed drills for direct seeding;
- special tractors;
- herbicide sprayers;
- seed and fertilizer drill systems;
- combine harvesters, etc.

No-till farming technology provides for covering the ground surface with a layer of mulch, i.e. residues of purposely shredded plants. As the top layer of soil is not disturbed, and residues cover the ground such a farming system prevents water and wind erosion of soil and ensures much better water retention; in addition, No-till nullifies GHG emissions into the atmosphere.

Additional benefits of the project (in addition to the ones stated in the purpose of the project):

- a) lower crops production costs due to lower diesel fuel consumption in the process of crop growing;
- b) lower consumption of chemical fertilizers in the process of crop growing;
- c) lower impact of weather conditions on yields;



- d) lower wind and water soil erosion, better soil fertility;
- e) reduced greenhouse gas emissions into the atmosphere due to lower diesel fuel combustion by agricultural machinery in the course of crop production using No-till technology.

Historical details of the project:

28/09/2006 - Contract between Ltd “Obriy-MTS-Rozdylna” and “Khlibna havan” LLC for the purchase of agricultural equipment

28/05/2012 – Preparation and submission of the project idea note to support anthropogenic GHG emission reductions to the State Environmental Investment Agency of Ukraine.

25/07/2012 – the State Environmental Investment Agency of Ukraine issued a Letter of Endorsement No.1969/23/7 for the Joint Implementation project “Reduction of CO₂ emissions by systematic utilization of No-till technology at Ltd “Obriy-MTS-Rozdylna” farmlands”.

Determination protocol of the project contains CARs and CLs for PDD versions 01 and 02.

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, Corrective and Forward 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 36 Corrective Action Requests and 8 Clarification Requests.

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



4.1 Project approvals by Parties involved (19-20)

The project “Reduction of CO₂ emissions by systematic utilization of No-till technology at Ltd “Obriy-MTS-Rozdylna” farmlands” has already obtained endorsement from the government of Ukraine, namely a Letter of Endorsement No.1969/23/7 issued by the State Environmental Investment Agency of Ukraine dated 25/07/2012.

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

Upon completion of the Determination Report the project design document will be submitted to the State Environmental Investment Agency of Ukraine for receiving a Letter of Approval.

As the project has no approval by the Parties involved, CAR 15 remains pending and will be closed after report finalizing (see Appendix A).

The identified areas of concern as to the project approval by the Parties involved, project participants response and BVC’s conclusion are described in Appendix A to the Determination Report (refer to CAR 15).

4.2 Authorization of project participants by Parties involved (21)

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

4.3 Baseline setting (22-26)

The PDD explicitly indicates that using a methodology for baseline setting and monitoring developed in accordance with the requirements of Appendix B of the JI Guidelines (hereinafter referred to as “specific approach”) was the selected approach for setting the baseline (in accordance with paragraph 11 of the Guidance on criteria for baseline setting and monitoring (Version 03)).

In order to set the baseline the specific approach was used since there aren’t any approved baseline and monitoring methodologies for such project activities at the moment.

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



- (a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:
- a. Continuation of the current situation, without the JI project implementation.
 - b. Proposed project activity without the use of the JI mechanism.
 - c. Partial project activities (some of the project activities are implemented) without the use of the Joint Implementation Mechanism.
- (b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, agricultural sector expansion plans, and the economic situation in the project sector. In this context, the following key factors that affect a baseline are taken into account:
- a. Agriculture is one of the leading industries in Ukraine; Agriculture in general and agro-industrial complex (AIC) in particular are a political factor of sovereignty. Ukraine is deemed to be one of the most agrarian states of the world; its foreign trade turnover of agricultural products amounted to USD 19.8 billion in 2011. On January 12, 2012 National Scientific Centre "Institute of Agricultural Policy" under the direction of the National Academy of Agricultural Sciences of Ukraine developed "Strategic guidelines for the development of agriculture of Ukraine till 2020". According to this strategy further development of the industry requires major transformation, one of which is the implementation of No-till technologies. These technologies are capable of ensuring the competitiveness of agricultural production and food security and they consist in decrease of production costs through the introduction of environmental, energy and resource saving technologies.
 - b. In the framework of the existing market model for the growing of AIC products, the effective competition among the producers can't be achieved; this market model can't also provide for the competitive pricing, which would stimulate the producers to improve efficiency and increase investment in the sector. Existing market mechanisms and targeted administrative measures don't provide for the necessary modernization and upgrading of the existing AIC product growing systems. The situation is becoming particularly critical given the growth of the need for food products both at the national level and worldwide; the lack



of these products represents a threat to safe development of global economy and people in general.

- c. Existing prices for AIC product growing are regulated by the state and do not include depreciation and investment needs of producers. This situation leads to a constant shortage of funds and the inability of timely capital repair of equipment, ensuring equipment operation, investment in modernization and development of the infrastructure.
- d. The current Ukrainian system of formation of prices for AIC products does not include an investment component for the development of agriculture. According to the Law "On Agriculture" Ltd "Obriy-MTS-Rozdylna" is not obliged and it is unmotivated to carry out modernization of its own production facilities. In addition, state investment programs in most cases are targeted at administrative and organizational implementations.
- e. State support in the agricultural sector is provided in amounts of funds provided by the law of Ukraine on State Budget of Ukraine for the relevant year.
- f. The project scenario requires attracting significant additional funds. Such investment is characterized by a significant payback period and high investment risks, that is why it is not attractive for investors.
- g. Ukraine has no experience in implementing similar JI projects in agricultural sector. The project implementation by means of selling emission reduction units will give Ukraine an opportunity to gain a useful experience in the use of direct sowing technologies.

The PDD provides a detailed description in a complete and transparent manner, as well as justification, that the baseline was duly set.

The methods of calculation used to determine the expected and actual baseline emissions, are sufficiently described in sections E and D of the PDD, respectively.

The identified areas of concern as to the baseline setting, project participants response and BVC's conclusion are described in Appendix A to the Determination Report (refer to CAR 16 – CAR 22).



4.4 Additionality (27-31)

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

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

The developer of the project proved that anthropogenic emissions under the project are lower than the emissions that would take place in the absence of the project activity.

Additionality proofs are provided.

Three plausible and realistic alternative scenarios of the project were identified:

- Alternative 1.1: Continuation of the current situation, without the JI project implementation.
- Alternative 1.2: Proposed project activity without the use of the JI mechanism.
- Alternative 1.3: Partial project activities (some of the project activities are implemented) without the use of the Joint Implementation Mechanism.

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

According to the “Tool for the demonstration and assessment of additionality” (Version 06.0.0) investment analysis and common practice analysis were used in the PDD to justify additionality of the project.

Thus, the overall conclusion is that the project activity meets the criteria of additionality, is not a baseline scenario and is additional.

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

The identified areas of concern as to the additionality, project participants response and BVC’s conclusion are described in Appendix A to the Determination Report (refer to CAR 23 – CAR 27, CL 07).

4.5 Project boundary (32-33)

The project boundary, which is defined in the PDD and in accordance with the specific approach, delineated by the physical, geographical location of farmlands with the total area of 7 128.55 ha where Ltd “Obriy-MTS-



Rozdylna” grows crop products, encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

- (i) Under the control of the project participants such as:
 - CO₂ emissions due to tillage that involves ploughing in the process of crop growing.
- (ii) Reasonably attributable to the project such as:
 - CO₂ emissions due to No-till technology utilized in the process of crop growing. Such CO₂ emissions are absent;
- (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 CO₂ 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 contract between Ltd “Obriy-MTS-Rozdylna” and “Khibna havan” LLC for the purchase of agricultural equipment was signed, and the starting date is 28/09/2006, which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 20 years or 240 months – from January 1, 2008 to December 31, 2027.

The PDD states the length of the crediting period in years and months, which is 20 years or 240 months, and its starting date of the crediting period is 01/01/2008, which is the date the first emission reductions are expected to be generated by the project.

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

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



The identified areas of concern as to the crediting period, project participants response and BVC's conclusion are described in Appendix A to the Determination Report (refer to CAR 28).

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach was 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 reporting forms, the operating structure and management structure of the enterprise, that will be applied when implementing the monitoring plan.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions to be monitored such as: humus content in the soil of field cultivated using traditional tillage, soil density at field cultivated using traditional tillage, depth of soil layer disturbance at field when conventional tillage is applied, area of field cultivated using No-till technology, humus content in the soil of field cultivated using No-till technology.

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

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

- (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once, and that are available already at the stage of PDD development:

$k_{b,i,y}$	Humus content in the soil of field i cultivated using traditional tillage, in period y , %
$\rho_{i,y}$	Soil density at field i cultivated using traditional tillage, in period y , t/m^3
$h_{b,i}$	Depth of soil layer disturbance at field i cultivated using traditional tillage, m



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(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once, but that are not already available at the stage of PDD development: none.

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

$S_{p,i}$	Area of field i cultivated using No-till technology, ha
$k_{p,i,y}$	Humus content in soil of field i cultivated using No-till technology, in period y , %

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, such as data archiving in hard copy and electronic form.

The most objective and cumulative factor that provides a clear picture of whether the emission reductions took place is the fact of GHG emission reductions due to reduction of carbon dioxide emissions from cultivated soil by reducing (almost to zero) topsoil disturbance in the process of technological procedures of soil cultivation for crop growing. It can be defined as the difference between baseline GHG emissions and GHG emissions after the project implementation.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions and project emissions such as:

Formulae used to estimate project emissions (for each gas, source etc.; emissions in units of CO₂ equivalent):

GHG emissions in the project scenario are absent.

$$PE_y = 0 \quad (1)$$

where

PE_y – project GHG emissions in period y , t CO₂eq;

$[y]$ – index corresponding to monitoring period.

Formulae used to estimate baseline emissions (for each gas, source etc.; emissions in units of CO₂ equivalent):

GHG emissions in the baseline scenario in period y are calculated according to the following formula:

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$$BE_y = BE_{A,y}$$

(2)

where

BE_y – baseline GHG emissions in period y , t CO₂eq;

$BE_{A,y}$ – baseline GHG emissions due to the use of baseline land cultivation technology, in period y , t CO₂eq;

$[y]$ – index corresponding to monitoring period system;

$[A]$ – index corresponding to system of baseline land cultivation technology.

Baseline emissions due to application of baseline land cultivation technology can be calculated as follows:

$$BE_{A,y} = \sum BE_{A,i,y}$$

(3)

where

$BE_{A,y}$ – baseline GHG emissions due to the use of baseline land cultivation technology, in period y , t CO₂eq;

$BE_{A,i,y}$ – baseline GHG emissions due to baseline land cultivation technology, in period y , t CO₂eq;

$[y]$ – index corresponding to monitoring period system;

$[A]$ – index corresponding to system of baseline land cultivation technology;

$[i]$ – index corresponding to system of number of fields.

Baseline GHG emissions due to the use of baseline land cultivation technology, which involves tillage, for field i are calculated by using the formula, according to the “Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities” (Version 01.1.0):

$$BE_{A,i,y} = 0,9 \times S_{p,i} \times (SOC_{p,y,i} - SOC_{b,y,i}) \times \frac{44}{12},$$

(4)

where

$BE_{A,i,y}$ – baseline GHG emissions due to the use of baseline land cultivation technology, in period y , t CO₂eq;

$S_{p,i}$ – area of field i , cultivated by using No-till technology, ha;

$SOC_{p,y,i}$ – soil organic carbon content in the soil of field i when No-till technology is applied in period y , t C/ha;

$SOC_{b,y,i}$ – soil organic carbon content in the soil of field i cultivated using traditional tillage in period y , t C/ha;

44/12 – CO₂ to C molecular masses ratio;

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0.9 – conservative factor that takes account of emissions from the project activity, which includes creation of anti-fire furrows and minimal topsoil disturbance when No-till technology is implemented;

[y] – index corresponding to monitoring period system;

[b] – index corresponding to system of baseline technology;

[p] – index corresponding to system of project technology;

[A] – index corresponding to system of baseline land cultivation technology;

[i] – index corresponding to system of number of fields.

Soil organic carbon content in the soil of field *i* cultivated by using No-till technology is calculated by the following formula:

$$SOC_{p,y,i} = h_{b,i} \times \rho_i \times k_{p,i,y} \div 1.724 \times 10000 \div 100\% \quad (5)$$

where

$SOC_{p,y,i}$ – soil organic carbon content in the soil of field *i* when No-till technology is applied in period *y*, t C/ha;

$h_{b,i}$ – depth of soil disturbance in field *i* cultivated by using traditional tillage, m;

ρ_i – soil density in field *i*, cultivated by using traditional tillage prior to the project, t/m³;

$k_{p,i,y}$ – humus content in the soil of field *i* cultivated by using No-till technology in period *y*, %;

1,724 – organic carbon to humus conversion coefficient (according to GOST 23740)

10000 – m² to ha conversion coefficient;

[y] – index corresponding to monitoring period system;

[b] – index corresponding to system of baseline technology;

[p] – index corresponding to system of project technology;

[i] – index corresponding to system of number of fields.

Soil organic carbon content in the soil of field *i* cultivated by using traditional tillage is calculated as follows:

$$SOC_{b,y,i} = h_{b,i} \times \rho_i \times k_{b,i,y} \div 1.724 \times 10000 \div 100\%, \quad (6)$$

where

$SOC_{b,y,i}$ – soil organic carbon content in the soil of field *i* cultivated by using traditional tillage in period *y*, t C/ha;

$h_{b,i}$ – depth of soil disturbance of field *i* cultivated by using traditional tillage, m;

ρ_i – soil density in field *i*, cultivated by using traditional tillage, in period *y*, t/m³;

$k_{b,i,y}$ – humus content in the soil of field *i* cultivated by using traditional tillage in period *y*, %;

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1,724 – organic carbon to humus conversion coefficient (according to GOST 23740)

10000 – m² to ha conversion coefficient;

[b] – index corresponding to system of baseline technology;

[y] – index corresponding to monitoring period system;

[i] – index corresponding to system of number of fields.

The content of humus in the baseline scenario is calculated by using historical data over a three-year period. Linear dependence proved to be the most reliable (100%) out of other relations. It provides for the extrapolation of humus content values to years of the project life. As a result of linear approximation, the dependence is as follows (extrapolation is performed for each field individually):

$$k_{b,i,y} = a \cdot y + b, \quad (7)$$

Coefficients a, b (see Supporting Document 1) are determined using Microsoft Excel features by building a trend line on the basis of historical data over the 5 years prior to the project. The linear dependence has the lowest function error.

where

$k_{b,i,y}$ – humus content in the soil of field i cultivated by using traditional tillage in period y , %;

a – coefficient of linear dependence;

b – coefficient of linear dependence;

[b] – index corresponding to system of baseline technology;

[i] – index corresponding to system of number of fields;

[y] – index corresponding to monitoring period system.

Formulae used to calculate emission reductions from the project (for each gas, source etc.; emissions/emission reductions in units of CO₂ equivalent):

Emission reductions resulting from the project activity are calculated using the following formula:

$$ER_y = BE_y - PE_y \quad (8)$$

where

ER_y – GHG emission reductions due to the project activity in period y , t CO₂eq;

BE_y – baseline GHG emissions in period y , t CO₂eq;

PE_y – project GHG emissions in period y , t CO₂eq;

[y] – index corresponding to monitoring period system.



Supporting document 1 contains a calculation of baseline and project emissions as well as emission reductions for each year of the reporting period.

The monitoring plan presents the quality assurance and control procedures for the monitoring process, which are sufficiently described in tabular form in Sections D.1.1.1., D.1.1.3. and 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.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. To implement the project an operating structure was established. It consists of Ltd "Obriy-MTS-Rozdylna" agronomists and engineers (they are responsible for the accounting of area, which is cultivated by No-till technology), Engineering and Technological Institute "Biotekhnika" (they are responsible for providing agrochemical data for project monitoring), Ltd "Obriy-MTS-Rozdylna" chief agronomist (records and reports data in the table) and Ltd "Obriy-MTS-Rozdylna" manager (handles and archives the data provided). All data are stored on paper and in electronic form.

The management structure includes Ltd "Obriy-MTS-Rozdylna" director and CEP CARBON EMISSIONS PARTNERS S.A. developers of the project.

The monitoring plan provides 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, commercial and scientific literature etc.) but not including data that are calculated with equations

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

The identified areas of concern as to the monitoring plan, project participants response and BVC's conclusion are described in Appendix A to the Determination Report (refer to CAR 29 - CAR 35; CL 07).

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential leakage of the project and appropriately explains which sources of leakage are to be calculated, and which can be neglected.

According to the selected specific approach used in this JI project, there are no potential sources of leakage from the project activity.



All emissions from combustion of diesel fuel are included in the potential project emissions because the combustion takes place at fields and is included in the project boundary.

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 which are 0 tons of CO₂eq in 2008-2012, 0 tons of CO₂eq in 2013-2027;
- (b) Leakage is not expected in the project boundary;
- (c) Emissions for the baseline scenario (within the project boundary), which are 301 352 tons of CO₂eq in 2008-2012, 1 579 935 tons of CO₂eq in 2013-2027;
- (d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are 301 352 tons of CO₂eq in 2008-2012, 1 579 935 tons of CO₂eq in 2013-2027.

The estimates referred to above are given:

- (a) On an annual basis;
- (b) From 01/01/2008 to 31/12/2027, covering the whole crediting period;
- (c) On a source-by-source basis;
- (d) For each GHG gas, which is CO₂;
- (e) In tonnes of CO₂ equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol.

The formula used for calculating the estimates referred above, are given in section 4.7. All formulae are consistent throughout the PDD.

For calculating the estimates referred to above, such key factors as the Ukrainian environmental legislation and other national legislation, as well as key relevant factors such as availability of funds for implementation of



measures envisaged by the project, prices that are set by the state, modern technology and the ability to implement know-how in the agricultural sector, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

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

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

The estimates referred to above are consistent throughout the PDD.

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

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

The identified areas of concern as to the estimation of emission reductions, project participants response and BVC's conclusion are described in Appendix A to the Determination Report (refer to CAR 34, CAR 36).

4.10 Environmental impacts (48)

Sections F.1. and F.2. of the PDD provide information about documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.

The PDD states that according to the law of Ukraine "On Environmental Protection" and DBN A.2.2-1-2003 «Composition and content of the materials of environment impact assessment (EIA) for design and construction of plants, buildings and structures», Ltd "Obriy-MTS-Rozdylna" is not obliged to carry out EIA development for this type of project.

In general, the project will have positive impact on the environment because the replacement of conventional tillage with No-till technology



will result in lower GHG emissions into the atmosphere and lower diesel fuel consumption for Ltd “Obriy-MTS-Rozdylna” farmland cultivation.

Transboundary impacts due to the project activity according to their definition in the text of “Convention on long-range transboundary pollution”, ratified by Ukraine, will not take place.

The PDD provides conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party.

The identified areas of concern as to the environmental impacts, project participants response and BVC’s conclusion are described in Appendix A to the Determination Report (refer to CL 08).

4.11 Stakeholder consultation (49)

Ltd “Obriy-MTS-Rozdylna” informed the community through mass media. All comments received were positive. No negative comments on the project have been reported.

4.12 Determination regarding small scale projects (50-57)

Not applicable.

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

Not applicable.

4.14 Determination regarding programmes of activities (65-73)

Not applicable.

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

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

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the “Reduction of CO₂ emissions by systematic utilization of No-till technology at Ltd “Obriy-MTS-Rozdylna” farmlands” Project in Ukraine. The



determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

Project participant/s used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides 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 one pending issue related to the current determination stage of the project: the issue of the written approval of the project by the host Party (Ukraine). If the written approval by the host Party is awarded, it is our opinion that the project as described in the Project Design Document, Version 02 dated 20/08/2012 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria as well as project stakeholders expectations.

The review of the project design documentation (version 02 dated 0/08/2012) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

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



7 REFERENCES

Category 1 Documents:

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

/1/	The PDD "Reduction of CO ₂ emissions by systematic utilization of No-till technology at Ltd "Obriy-MTS-Rozdylna" farmlands", version 01 dated 13/07/2012
/2/	The PDD "Reduction of CO ₂ emissions by systematic utilization of No-till technology at Ltd "Obriy-MTS-Rozdylna" farmlands", version 02 dated 20/08/2012
/3/	Supporting document 1. "Reduction of CO ₂ emissions by systematic utilization of No-till technology at Ltd "Obriy-MTS-Rozdylna" farmlands"
/4/	Supporting documents 2. Investment analysis of the JI project "Reduction of CO ₂ emissions by systematic utilization of No-till technology at Ltd "Obriy-MTS-Rozdylna" farmlands"
/5/	"Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" (Version 01.1.0)
/6/	Letter of Endorsement No.1969/23/7 issued by the State Environmental Investment Agency of Ukraine dated 25/07/2012
/7/	Guidelines for users of the JI PDD form. Version 04, JISC
/8/	Tool for the demonstration and assessment of additionality, version 06.0.0.
/9/	The Kyoto Protocol
/10/	Marrakesh Agreement, JI Methods
/11/	National inventory of greenhouse gas anthropogenic emissions by sources and removals by sinks in Ukraine for the period of 1990-2010
/12/	Third National Communication of Ukraine on climate change under the Kyoto Protocol
/13/	Fourth National Communication of Ukraine on climate change under the Kyoto Protocol
/14/	Fifth National Communication of Ukraine on climate change under the Kyoto Protocol
/15/	Law of Ukraine "On fundamental principles of state agricultural policy until 2015"
/16/	Law of Ukraine "On Environmental Protection"
/17/	Strategic directions of the development of agriculture in Ukraine until 2020



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/18/	JI guidelines. Appendix to decision 9/CDM.1.
/19/	JI Determination and Verification Manual, Version 01
/20/	Guidance on criteria for baseline setting and monitoring, JISC. Version 03.

Category 2 Documents:

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

/1/	Sale-purchase agreement № 180 dated 28/09/2006 (MTZ-82.1 tractors, TANZI 6750 drills, deflector plates, kadan-telescopic shaft, KORNIK 2,8 RP mulch-maker)
/2/	Delivery and acceptance certificate № MT-0000012 based on sale-purchase agreement № 180 dated 29/09/2006 (MTZ-82.1 tractor)
/3/	Delivery and acceptance certificate № MT-0000011 based on sale-purchase agreement № 180 dated 29/09/2006 (MTZ-82.1 tractor)
/4/	Delivery and acceptance certificate № MT-0000010 based on sale-purchase agreement № 180 dated 29/09/2006 (TANZI 6750 drill)
/5/	Delivery and acceptance certificate № MT-0000009 based on sale-purchase agreement № 180 dated 29/09/2006 (TANZI 6750 drill)
/6/	Delivery and acceptance certificate № MT-0000008 based on sale-purchase agreement № 180 dated 29/09/2006 (KORNIK 2,8 RP mulch-maker)
/7/	Delivery and acceptance certificate based on sale-purchase agreement № 180 dated 29/09/2006 (MTZ-82.1 tractor "Belaous")
/8/	Delivery and acceptance certificate based on sale-purchase agreement № 180 dated 29/09/2006 (MTZ-82.1 tractor "Belaous")
/9/	Sale-purchase agreement № 89/208-2006 dated 07/12/2006 (spraying machine OPSh-2000)
/10/	Sale-purchase agreement № 89/212-2006 dated 08/12/2006 (NZ-20 grain loading machines with extended augers and hoppers for loading fertilizers)
/11/	Delivery and acceptance certificate dated 16/01/2007 (NZ-20 grain loading machine)
/12/	Delivery agreement № 84/1/234 dated 21/11/2006 (TMK-160 tilt-covered trailers with screws for loading drills)
/13/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000001 dated 11/01/2007 (TMK-160 tilt-covered trailer)
/14/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000001 dated 11/01/2007 (TMK-160 tilt-covered trailer)
/15/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000001 dated 11/01/2007 (TMK-160 tilt-covered trailer)
/16/	Sale-purchase agreement № 14-02/29 dated 14/02/2007 (John Deere drills, "Niva" control system, grain legume header, finger cassette)



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/17/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000022 dated 31/03/2007 (grain legume header mod925F cep #H00925F641714)
/18/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000015 dated 31/03/2007 (drill John Deere 7000 Planter № A07000B011649)
/19/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000018 dated 31/03/2007 (drill John Deere 7000 8R30 № A07000B081003)
/20/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000016 dated 31/03/2007 (grain legume header mod925F cep #H00925F651897)
/21/	Sale-purchase agreement № 2-12 dated 12/12/2007(drills John Deere, "Niva" control system, grain legume header, finger cassette)
/22/	certificate of transfer of the ownership of property to Ltd "Obriy-MTS-Rozdylna" according to sale-purchase agreement № 2-12 dated 12/12/2007 as of 02/04/2008
/23/	Sale-purchase agreement № 110 dated 20/06/2007 (ZM-60A grain loading machine)
/24/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000077 dated 21/06/2007 (ZM-60A grain loading machine)
/25/	Sale-purchase agreement № 323/366 dated 17/07/200 (C3-5,4 grain drill)
/26/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000164 dated 02/08/2007 (C3-5,4 grain drill (zav 405))
/27/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000165 dated 02/08/2007 (C3-5,4 grain drill (zav 410))
/28/	Sale-purchase agreement № 10/09/168 dated 10/09/2007 (C3-5,4 grain drill)
/29/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000295 dated 28/09/2007 (C3-5,4 grain drill (2 discs with single-openers))
/30/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000296 dated 28/09/2007 (C3-5,4 grain drill (2 discs with single-openers))
/31/	Sale-purchase agreement № 301 dated 23/01/2008 (tractor trailers, feed augers)
/32/	Machine delivery and acceptance certificate № 4 dated 28/01/2008 (TMK-160 tractor trailers with patches)
/33/	Machine delivery and acceptance certificate № 6 dated 01/02/2008 (TMK-160 tractor trailers with patches)
/34/	Sale-purchase agreement № 7 dated 24/01/2008 (T-150K09 tractors)
/35/	Agricultural machine delivery and acceptance certificate (XTZ-150K09 tractor)
/36/	Special machinery financial leasing agreement № 12/04/08-L dated

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	22/05/2008 (Montana Paruda MA 2627M self-propelled sprayer)
/37/	Sale-purchase agreement «№ 236 dated 21/12/2007 (MVD-900 spreader)
/38/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № MT-0000319 (MVD-900 spreader)
/39/	Agricultural machine sale-purchase agreement № 20-2009 dated 22/01/2009 (MVU-900 inorganic fertilizer material spreader)
/40/	Certificate of delivery and acceptance (incompany transportation) of non-current assets № 1 (MVD-900 spreader)
/41/	Sale-purchase agreement № 97 dated 14/092009 (BDVP A 4,2 harrow – 1 unit)
/42/	Certificate of delivery and acceptance товарів по кількості і якості dated 18/09/2009 (борона БДВП А 4,2 – 1шт.)
/43/	Sale-purchase agreement № 22 dated 6/07/2010 (BDVP A 4,2 harrow – 2 units)
/44/	Certificate of delivery and acceptance dated 08/07/2010 (BDVP A 4,2 harrow – 2 units)
/45/	Protocol of soil quality parameter measurements № 1999 dated July 2, 2012
/46/	Protocol of soil quality parameter measurements № 1997 dated July 2, 2012
/47/	Protocol of soil quality parameter measurements № 1995 dated July 2, 2012
/48/	Protocol of soil quality parameter measurements № 1993 dated July 2, 2012
/49/	Protocol of soil quality parameter measurements № 1991 dated July 2, 2012
/50/	Protocol of soil quality parameter measurements № 1989 dated July 2, 2012
/51/	Protocol of soil quality parameter measurements № 1987 dated July 2, 2012
/52/	Protocol of soil quality parameter measurements № 1963-6 dated July 2, 2012
/53/	Protocol of soil quality parameter measurements № 1961-6 dated July 2, 2012
/54/	Protocol of soil quality parameter measurements № 1959-6 dated July 2, 2012
/55/	Protocol of soil quality parameter measurements № 2007-6 dated July 2, 2012
/56/	Protocol of soil quality parameter measurements № 2006-6 dated July 2, 2012
/57/	Protocol of soil quality parameter measurements № 2005-6 dated July 2, 2012
/58/	Protocol of soil quality parameter measurements № 2014-7 dated July 2, 2012
/59/	Protocol of soil quality parameter measurements № 2012-7 dated July 2, 2012



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/60/	Protocol of soil quality parameter measurements № 2010-7 dated July 2, 2012
/61/	Protocol of soil quality parameter measurements № 2008-7 dated July 2, 2012
/62/	Protocol of soil quality parameter measurements № 2006-7 dated July 2, 2012
/63/	Protocol of soil quality parameter measurements № 2004-7 dated July 2, 2012
/64/	Protocol of soil quality parameter measurements № 2017-8 dated July 2, 2012
/65/	Protocol of soil quality parameter measurements № 2015-8 dated July 2, 2012
/66/	Protocol of soil quality parameter measurements № 2013-8 dated July 2, 2012
/67/	Protocol of soil quality parameter measurements № 2011-8 dated July 2, 2012
/68/	Protocol of soil quality parameter measurements № 2009-8 dated July 2, 2012
/69/	Protocol of soil quality parameter measurements № 2007-8 dated July 2, 2012
/70/	Protocol of soil quality parameter measurements № 2017-9 dated July 18, 2012
/71/	Protocol of soil quality parameter measurements № 2015-9 dated July 18, 2012
/72/	Protocol of soil quality parameter measurements № 2013-9 dated July 18, 2012
/73/	Protocol of soil quality parameter measurements № 2011-9 dated July 18, 2012
/74/	Protocol of soil quality parameter measurements № 2009-9 dated July 18, 2012
/75/	Protocol of soil quality parameter measurements № 2007-9 dated July 18, 2012
/76/	Protocol of soil quality parameter measurements № 2017-10 dated July 20, 2012
/77/	Protocol of soil quality parameter measurements № 2015-10 dated July 20, 2012
/78/	Protocol of soil quality parameter measurements № 2013-10 dated July 20, 2012
/79/	Protocol of soil quality parameter measurements № 2011-10 dated July 20, 2012
/80/	Protocol of soil quality parameter measurements № 2009-10 dated July 20, 2012
/81/	Protocol of soil quality parameter measurements № 2017-11 dated July 23, 2012
/82/	Protocol of soil quality parameter measurements № 2015-11 dated July 23, 2012



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/83/	Protocol of soil quality parameter measurements № 2013-11 dated July 23, 2012
/84/	Protocol of soil quality parameter measurements № 2011-11 dated July 23, 2012
/85/	Protocol of soil quality parameter measurements № 2009-11 dated July 23, 2012
/86/	Protocol of soil quality parameter measurements № 2007-11 dated July 23, 2012
/87/	Protocol of soil quality parameter measurements № 2017-12 dated December 17, 2012
/88/	Protocol of soil quality parameter measurements № 2015-12 dated December 17, 2012
/89/	Protocol of soil quality parameter measurements № 2013-12 dated December 17, 2012
/90/	Protocol of soil quality parameter measurements № 2011-12 dated December 17, 2012
/91/	Protocol of soil quality parameter measurements № 2009-12 dated December 17, 2012
/92/	Protocol of soil quality parameter measurements № 2007-12 dated December 17, 2012
/93/	Protocol of soil quality parameter measurements № 2005-12 dated December 17, 2012
/94/	Protocol of soil quality parameter measurements № 2003-12 dated December 17, 2012

Persons interviewed:

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

	Name	Organization	Position
/1/	Dmytro Dobrovolskyi	Ltd "Obriy-MTS-Rozdylna"	Director
/2/	Oleksandr Tymchuk	Ltd "Obriy-MTS-Rozdylna"	Administration manager
/3/	Larysa Omelchuk	Ltd "Obriy-MTS-Rozdylna"	Deputy financial director
/4/	Olha Removska	Ltd "Obriy-MTS-Rozdylna"	Chief accountant
/5/	Tetiana Voinikova	Ltd "Obriy-MTS-Rozdylna"	Chief economist
/7/	Iryna Naumenko	LLC «CEP»	Consultant of CEP CARBON EMISSIONS PARTNERS S.A..



DETERMINATION REPORT

APPENDIX A: COMPANY PROJECT DETERMINATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

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

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
Guidelines for Users of the JI PDD form				
Section A General description of the project				
A.1. Title of the project				
A.1	Is the title of the project presented?	The title is presented. The title of the project is "Reduction of CO ₂ emissions by systematic utilization of No-till technology at Ltd "Obriy-MTS-Rozdylna" farmlands".	OK	OK
A.1	Is the sectoral scope to which the project pertains presented?	Sectoral scope: Sectoral scope 15 - Agriculture	OK	OK
A.1	Is the current version number of the document presented?	The current version of the document: PDD, Version 02 dated 20/08/2012. See Section A.1.	OK	OK
A.1	Is the date when the document was created presented?	The date when the document was created: 20/08/2012.	OK	OK
A.2. Description of the project				
A.2	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the:	The purpose of the Joint Implementation (JI) Project is to reduce anthropogenic greenhouse gas (GHG) emissions resulting from agricultural activities by	CAR 01	OK



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>a) Situation existing prior to the starting date of the project b) Baseline scenario and c) Project scenario (expected outcome, including a technical description)?</p>	<p>changing the agricultural land management system, namely replacement of traditional soil tillage in agriculture with No-till technology. Emissions are reduced due to lower carbon dioxide emissions from farmland by reducing (almost zero) topsoil disturbance by tillage in the course of crops growing.</p> <p>In 2008, the Farm started to grow crops applying No-till technology (also referred to as “direct sowing technology”). This technology differs from the traditional technology because it provides for fewer technological procedures, which prevents the topsoil from a major disturbance, and it also differs with the way to utilize plant residues. The number of technological procedures of plant growing and harvesting is almost the same in the two technologies. The main difference is that the traditional technology provides for the processes of fertilizer application, land ploughing, cultivation, furrowing and seeding (multiple passage of the machinery in the field) direct sowing provides for simultaneous fertilizer application and sowing (single passage of the machinery). The lower number of technological procedures in No-till provides for up to 60% lower fuel consumption in internal combustion engines of tractors and other agricultural machinery.</p>		



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		Detailed information on the baseline and project scenarios with technical description is given in Sections A.2 and A.4.2. of the PDD. CAR 01. Please, add information on the core activities of the company to Section A.2.		
A.2	Is the history of the project (incl. its JI component) briefly summarized?	CAR 02. Please, specify the date of obtaining of a letter of support. CAR 03. Please, state the project starting date in Section A.2. of the PDD.	CAR 02 CAR 03	OK OK
A.3. Project participants				
A.3	Are project participants and Party (ies) involved in the project listed?	CAR 04. Please, indicate all the project participants in Section A.3 of the PDD.	CAR 04	OK
A.3	Is the data of the project participants presented in tabular format?	The data of the project participants is presented in tabular format.	OK	OK
A.3	Is contact information provided in Annex 1 of the PDD?	Contact information on Ltd "Obriy-MTS-Rozdylna", EVO CARBON TRADING SERVICES LTD, CEP Carbon Emissions Partners S.A., LHCarbon OÜ is provided in Annex 1 of the PDD. CAR 05. Please, provide direct telephone numbers of the project participants in Annex 1.	CAR 05	OK
A.3	Is it indicated, if it is the case, that the Party involved is a host Party?	Ukraine is the Host Party.	OK	OK



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
A.4 Technical description of the project				
Location of the project				
A.4.1.1	Host Party(ies)	Ukraine is the Host Party.	OK	OK
A.4.1.2	Region/State/Province etc.	Rozdilianskyi district of Odesa region, Ukraine	OK	OK
A.4.1.3	City/Town/Community etc.	Villages of Rozdilianskyi district of Odesa region	OK	OK
A.4.1.4	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page).	Information about location is given in Section A.4.1.4 of the PDD. CAR 06. Please, provide detailed information about the location of the project.	CAR 06	OK
A.4.2. Technologies to be employed, or measures, operations or actions to be implemented by the project				
A.4.2	Are the technology (ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	PDD Section A.4.2 provides the description of the main stages of the project implementation, the annual project activities schedule, some relevant technical data relating to main equipment to be implemented as well as project activities. Project design represents the current cutting-edge practice. CAR 07. Please, provide information on possible crop rotation schemes planned by the project activities, in Section A.4.2. CAR 08. Please, provide information on soil compaction removal methods.	CAR 07 CAR 08 CAR 09 CAR 10 CAR 11 CAR 12 CL 01 CL 02 CL 03 CL 04 CL 05	OK OK OK OK OK OK OK OK OK OK



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		<p>CAR 09. Please, provide correct reference to the John Deere 7000 No-Till Box Drill manufacturer's website.</p> <p>CAR 10. Add units of measurement to the description of Montana PARPUDA MA 2627M Self Propelled Sprayer.</p> <p>CAR 11. Please, provide explanation for Figure 2. of Annex 4 to the PDD.</p> <p>CAR 12. Please, provide the schedule of the project implementation in tabular form, state the work beginning and ending dates for every activity and stage of the project.</p> <p>CL 01. Please, provide clarification on the use of chemical and biological method of weed control.</p> <p>CL 02. Please, provide information on replacement of equipment during the project activity.</p> <p>CL 03. Please, provide information regarding the advisability of special training of personnel.</p> <p>CL 04. Please, provide a brief description of John Deere 8530 tractor.</p> <p>CL 05. Please, provide explanation of the practicability of the use of John Deere and Belarus technological</p>		



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		equipment in the project activities.		
A.4.3. Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
A.4.3	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	<p>Emissions are reduced due to lower (almost zero) topsoil disturbance by tillage and, as a result, higher carbon sequestration (storage) in the soil by plants that take carbon from the atmosphere and transfer it into the soil (with further fixation in the soil) in the course of their biological activity. The project also envisages a decrease of diesel fuel consumption due to shorter land cultivation cycle.</p> <p>It is unlikely that the project would be implemented without the JI mechanism which provides a significant additional incentive. This is due to the following factors:</p> <ul style="list-style-type: none"> - In Ukraine there are no legal requirements relating to the introduction of direct sowing technology instead of conventional mechanical tillage systems. Implementation of this project could only be an initiative of an enterprise itself. No significant changes in the legislation that could force enterprises to give up the existing tillage practice, involving ploughing, are expected. - There are no restrictions for Ukrainian enterprises regarding GHG emissions and they are 	OK	OK



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		unlikely to be imposed. - Implementation of the project requires considerable investment in agricultural equipment and is associated with financial risks and risks relating to the operation of new technology, such as issues of productivity and use of new machinery. Without the income from the sale of emission reduction units (ERUs), the project is not attractive enough for investment.		
A.4.3	Is it provided the estimation of emission reductions over the crediting period?	The estimation of emission reductions over the crediting period is provided in Section A.4.3.1. of the PDD. CAR 13. The annual average emission reduction for 2008-2012 is calculated incorrectly. Please, make the necessary corrections.	CAR 13	OK
A.4.3	Is it provided the estimated annual reduction for the chosen credit period in tCO ₂ e?	CAR 14. In Section A.4.3.1., in the Table, providing the estimated amount of emission reductions for the period following the first commitment period (2013-2027), state the total estimated amount of emission reductions over the credit period in tonnes of CO ₂ equivalent.	CAR 14	OK
A.4.3	Are the data from questions above presented in tabular format?	Information on the crediting period, the period before and after the crediting period is presented in tabular format. See PDD (Version 02) Tables 7, 8, Section A.4.3.1.	OK	OK
A.4.3.1. Estimated amount of emission reductions over the crediting period				



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A.4.3.1	Is the length of the crediting period Indicated?	The length of the crediting period is indicated in the PDD Section A.4.3.1. and Section C.	OK	OK
A.4.3.1	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO ₂ equivalent provided?	Total as well as annual and average annual emission reductions in tonnes of CO ₂ equivalent are provided in accordance with the calculated values in the tables of Section A of PDD and the Supporting Documents. Refer to CAR 14 .	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	CAR 15 . The project has no approval of the Host party and the country-participant. To obtain the Letter of Approval the final Determination report must be submitted to the State Environmental Investment Agency of Ukraine that includes this Determination Protocol and the list of sources of Reference Information. A Letter of Approval of other party involved – country participant is also not obtained at the current stage of the Project. CAR 15 will be closed after the Letters of Approval are issued by the Parties involved.	CAR 15	Pending
19	Does the PDD identify at least the host Party as a "Party involved"?	The Host Party involved is Ukraine.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	Reference to CAR 15 .	CAR 15	Pending



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20	Are all the written project approvals by Parties involved unconditional?	Reference to CAR 15 .	CAR 15	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: <ul style="list-style-type: none"> - 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 (the host Party), legal entity is Ltd "Obriy-MTS-Rozdylna". Party involved 2: Estonia, legal entity LHCarbon OÜ. The project participants will be authorized in accordance with the relevant project approvals. Pending CAR 15	CAR 15	Pending
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? <ul style="list-style-type: none"> - JI specific approach - Approved CDM methodology approach 	The chosen baseline is described in Section B.1 of the PDD. A specific JI approach is used for setting the baseline.	OK	OK
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	The choice of the applicable baseline for the project is justified; detailed theoretical description is provided in section B.1 of PDD version 02. CAR 16 . The reference to "Tool for estimation of	CAR 16	OK



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		change in soil organic carbon stocks due to the implementation of afforestation/reforestation project activities" Version 01.1.0. is incorrect.		
23	<p>Does the PDD provide justification that the baseline is established:</p> <p>(a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one?</p> <p>(b) Taking into account relevant national and/or sectoral policies and circumstance? - Are key factors that affect a baseline taken into account?</p> <p>(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?</p> <p>(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?</p> <p>(e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure?</p>	<p>The PDD provides detailed, full and transparent description and justification that the baseline is established:</p> <p>(a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:</p> <ul style="list-style-type: none"> - Alternative 1.1: Continuation of the current situation, without the JI project implementation. - Alternative 1.2: Proposed project activity without the use of the JI mechanism. - Alternative 1.3: Partial project activities (some of the project activities are implemented) without the use of the Joint Implementation Mechanism. <p>(b) By taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, agricultural 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:</p> <ul style="list-style-type: none"> - agriculture is one of the leading industries in Ukraine; Agriculture in general and agro- 	CAR 17	OK



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	<p>(f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?</p>	<p>industrial complex (AIC) in particular are a political factor of sovereignty;</p> <ul style="list-style-type: none"> - in the framework of the existing market model for the growing of AIC products, the effective competition among the producers can't be achieved; this market model can't also provide for the competitive pricing, which would stimulate the producers to improve efficiency and increase investment in the sector' - existing prices for AIC product growing are regulated by the state; - the current Ukrainian system of formation of prices for AIC products does not include an investment component for the development of agriculture; - state support in the agricultural sector is provided in amounts of funds provided by the law of Ukraine on State Budget of Ukraine for the relevant year. <p>(c) In a transparent manner with regard to the choice of JI approach and assumptions, parameters, data sources and key factors for identifying initial conditions listed in tabular format in Section B.1.</p> <p>(d) By taking into account of uncertainties and using</p>		



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		<p>conservative assumptions</p> <p>(e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure</p> <p>(f) By drawing on the list of standard variables.</p> <p>The baseline is set; the description is given in Section B of the PDD.</p> <p>CAR 17. Please, provide relevant conclusion after the description of all plausible baseline scenarios.</p>		
24	<p>If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?</p>	<p>The baseline assumptions of the developed JI specific approach are clearly described in full in Section B.1 of the PDD version 02.</p> <p>CAR 18. The description of index D, indicating diesel fuel combustion system in the third formula, is irrelevant as there is no variable with such index there.</p> <p>CAR 19. In formula 3, explain the multiplier 0.9, used in calculation of the baseline GHG emissions due to application of baseline land cultivation technology.</p> <p>CAR 20. Please, provide description of index p for the fourth formula in Section B.1. of the PDD.</p> <p>CAR 21. Please, provide information on parameter $\kappa_{p,i,y}$ in Section B.1.</p> <p>CAR 22. Please, state the measurement/monitoring</p>	<p>CAR 18</p> <p>CAR 19</p> <p>CAR 20</p> <p>CAR 21</p> <p>CAR 22</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>



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		frequency for parameter ρ_i .		
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	A multi-project emission factor is used in calculations of emission reductions.	OK	OK
CDM methodology approach only				
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality (c) Application of the most recent version	The PDD indicates that the project scenario is not a part of the established baseline scenario. It is also stated that the project will lead to emission reductions. Additionality of the project activity is demonstrated in PDD Section B.2 using the "Tools for the demonstration and assessment of additionality" (Version 06.0.0). CL 06. Please, provide reference to the Law of Ukraine "On the basic principles of the governmental agrarian policy for the period until 2015". CAR 23. The sum of investment stated in the PDD doesn't correspond to the sum of investment stated in Supporting document 2. CAR 24. The calculation presented in Supporting document 2 is made for 2006-2026, whereas the project's closing date is 2027. Please, correct the investment analysis.	CL 06 CAR 23 CAR 24 CAR 25 CAR 26 CAR 27	OK OK OK OK OK OK



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	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".	<p>CAR 25. In Section B.2. of the PDD, it is stated that effective discount rate is adjusted by inflation index for Eurozone. The discount rate is not subject to inflation adjustments. Please, make the necessary corrections.</p> <p>CAR 26. Risk premium for the country is set for 2005, whereas the project starts at the end of 2006. Please, state the relevant premium for 2006.</p> <p>CAR 27. In Table 13. of the PDD the revenue of the company is expressed in hryvnias, whereas the calculations are made in euros. Please, make the relevant corrections.</p>		
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Detailed analysis described in Sections A.4.3, B.1 and B.2, shows that emissions of the baseline scenario are likely to exceed emissions of the project scenario due to the implementation of project activities.	OK	OK
29 (b)	Are additionality proofs provided?	Yes. Refer to Section B.2. of the PDD.	OK	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	<p>The fact that the project activity itself is not the baseline scenario is clearly demonstrated in Sections A.2, B.1, B.2 of the PDD.</p> <p>CL 07. Please, specify whether there are any mandatory government programs or policy which</p>	CL 07	OK



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		provide for mandatory implementation of No-till technologies by agricultural farms.		
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	All explanations, descriptions and analyses are made in accordance with the newest version of the "Tools for the demonstration and assessment of additionality". (Version 06.0.0)	OK	OK
Approved CDM methodology approach only_ Paragraphs 31(a) – 31(e)_ Not applicable				
Project boundary (applicable except for JI LULUCF projects)				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants such as: - CO ₂ emissions due to tillage that involves ploughing in the process of crop growing. (ii) Reasonably attributable to the project such as: - CO ₂ emissions due to No-till technology utilized in the process of crop growing. Such CO ₂ emissions are absent; (iii) Significant, i.e., as a rule of thumb, would by each source account on average per year over the crediting		



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		period for more than 1 per cent of the annual average anthropogenic emissions by sources of GHGs, or exceed an amount of 2,000 tonnes of CO ₂ equivalent, whichever is lower.		
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	Project boundary is defined on the basis of case-by-case assessment of different emission sources.	OK	OK
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart if it is possible?	The project boundary is presented in a tabular form and are understandable enough so that there is no need of graphic presentation.	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. See Section B of PDD.	OK	OK
Approved CDM methodology approach only_Paragraph 33_ Not applicable				
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	The starting date of the project was determined according to the Glossary of Joint Implementation Terms (version 03); the starting date of the project is 28/09/2006 the date on which the agricultural	OK	OK



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		equipment sale contract was signed. The starting date of the project is identified and specified in Section C. 1 of the PDD.		
34 (a)	Is the starting date after 2000?	The starting date is after 2000.	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	The expected operational lifetime of the project in years and months is 20 years, or 240 months, from 01/01/2008 to 31/12/2027.	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	The length of the crediting period is stated in years and months in Section C.3. CAR 28. The number of months of the crediting period is incorrect.	CAR 28	OK
34 (c)	Is the starting date of the crediting period before or after the date of the first emission reductions or enhancements of net removals generated by the project?	The starting date of the crediting period is the date when the first emission reduction units are expected to be generated, namely 01/01/2008.	OK	OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	Generation of ERUs relates to the first commitment period of 5 years (January 1, 2008 – December 31, 2012).	OK	OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party	The PDD states that the prolongation of the crediting period beyond 2012 is subject to approval of the host party and estimation of emission reductions is	OK	OK



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	approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	presented separately for those until 2012 and those after 2012 in the relevant sections of PDD. If after the first commitment period under the Kyoto protocol, the Kyoto protocol is prolonged, the crediting period under the project will be prolonged by 15 years/180 months until December 31, 2027.		
Monitoring Plan				
35	Does the PDD explicitly indicate which of the following approaches is used? – JI specific approach – Approved CDM methodology approach	The proposed project uses a JI specific approach based on the JI requirements in accordance with paragraph 9 (a) of the JI Guidance on criteria for baseline setting and monitoring, version 03.	OK	OK
JI specific approach only				
36 (a)	Does the monitoring plan describe: – All relevant factors and key characteristics subject to monitoring? – The period in which they will be monitored? – All critical factors for the control and reporting of project performance?	The monitoring plan specifies all key factors for the control and reporting on project performance: quality control (QC) and quality assurance (QA) procedures; operational and management structures that will be applied when implementing the monitoring plan. CAR 29. Please, provide description of parameter $k_{b,i,y}$ in Section D.1.1.3.	CAR 29	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used	The monitoring plan specifies indicators, constants and variables used that are reliable, valid and provide	CAR 30	OK



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	that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	transparent picture of the emission reductions or enhancement of net removals to be monitored. Data to be monitored are presented in section D of the PDD. CAR 30. Please, check data units of monitoring data and parameters in Sections D.1.1.1 and D.1.1.3 of the PDD in accordance with the formulae. CAR 31. Please, provide information on the source of data for parameter ρ_i , in Section D.1.1.3.	CAR 31	OK
36 (b)	If default values are used: – Are accuracy and reasonableness carefully balanced in their selection? – Do the default values originate from recognized sources? – Are the default values supported by statistical analyses providing reasonable confidence levels? – Are the default values presented in a transparent manner?	Default values are provided in the table of Annex 3 to the PDD. They originate from recognized sources and are presented in a transparent manner.	OK	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	The monitoring plan clearly indicates how the values are to be selected and justified.	OK	OK



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36 (b) (ii)	For other values, – Does the monitoring plan clearly indicate the precise references from which these values are taken? – Is the conservativeness of the values provided justified?	CAR 32. Please, number all formulae in Section D of the PDD. CAR 33. All the values of baseline and project emissions as well as emission reductions under the project are to be stated in tonnes of CO ₂ equivalent. Please, make the relevant corrections in the formulae provided in Section D.	CAR 32 CAR 33	OK OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Refer to section D of the PDD. CAR 34. Please, add to the information on data collection and archiving, in Section D.1.1.	CAR 34	OK
36 (b) (iv)	Are International System Units (IS units) used?	IS units are used for certain parameters.	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?	Relevant data necessary for determining the baseline scenario for anthropogenic emissions of greenhouse gases within the project boundary are presented in table D.1.1.3. of the PDD.	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	The use of parameters, coefficients and variables are consistent between the baseline and monitoring plan.	OK	OK
36 (c)	Does the monitoring plan draw on the list	The monitoring plan is set taking into account the	OK	OK



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	of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	"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 yet available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	The monitoring plan clearly distinguishes three types of data and parameters. Refer to Section D.1. of the PDD. (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 monitored throughout the crediting period. (iii) 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 yet available at the stage of determination are absent.	OK	OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	In tables of parameters provided in section D.1.1.1. of the PDD the time of monitoring (frequency) and the source of data to be used, as well as recording method are indicated for all the monitored parameters and data.	OK	OK
36 (f)	Does the monitoring plan elaborate all	All algorithms and formulae used for the estimation of	OK	OK



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	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?	baseline and project emissions are indicated and explained in the PDD. The description of formulae is provided in Section D of the PDD		
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Refer to section 36 (f) of this table.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts etc. are used.	OK	OK
36 (f) (iii)	Are all equations numbered?	See CAR 32 .	OK	OK
36 (f) (iv)	Are all variables with units indicated defined?	Yes. Refer to section D of the PDD.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes, algorithms/procedures comply with state norms and are conservative.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Uncertainty in parameters used is low taking into account the algorithms of data monitoring.	OK	OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for	There is consistency between the elaboration on the baseline scenario and procedure for calculating the baseline emissions in the monitoring plan and in tables.	OK	OK



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	calculating the emissions or net removals of the baseline ensured?			
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?	Monitoring under the project does not require changes in existing accounting and data collection system existing at Ltd "Obriy-MTS-Rozdylna".	OK	OK
36 (f) (vii)	Are references provided as necessary?	All necessary references are provided.	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.	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	N/A	OK	OK
36 (f) (vii)	Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?	To ensure conservativeness of parameters constant routine calibration of measuring equipment is carried out and the latest editions of the regulatory and technical documentation is used. In the absence of the latest editions of the regulatory and technical documentation their previous versions will be used.	OK	OK
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project?	The monitoring plan identifies that constant routine calibration of measuring equipment is carried out and the latest editions of the regulatory and technical documentation is used.	OK	OK



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	Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?			
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	Yes	OK	OK
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	Inspection (calibration) of recording and measuring equipment is carried out in accordance with manuals of the manufacturer, approved methodologies on verification/calibration of measuring equipment as well as according to the national standards of Ukraine. CAR 35. In Section D.2. of the PDD provide information on parameter $S_{p,i}$.	CAR 35	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Detailed operational and management structures are given in Section D.3 to the PDD.	OK	OK
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good	Monitoring under the project does not require any changes in existing accounting system and data collection procedure.	OK	OK



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	practice guidance developed by IPCC applied?			
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?	Tables in Sections D.1.1.1 and D.1.1.3 provide compilation of all data needed to monitor project and baseline emissions.	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 to be monitored and required for determination will be kept for two years after the last transfer of ERUs under 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?	Yes, selected elements of "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" (Version 01.1.0) are used for setting the baseline scenario. The selected elements and combinations with additional elements that were additionally developed by the project participants are in line with requirements of paragraph 36 above.	OK	OK
Approved CDM methodology approach only Paragraphs 38(a) – 38(d) Not applicable				
Applicable to both JI specific approach and approved CDM methodology approach				
39	If the monitoring plan indicates overlapping	No periods to overlap during the crediting period are	OK	OK



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>monitoring periods during the crediting period:</p> <p>(a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently?</p> <p>(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)?</p> <p>(c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met?</p> <p>(d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the</p>	<p>expected.</p>		



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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?	According to the JI specific approach, there aren't any potential sources of leakage due to the project activities.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	The PDD states that there isn't any leakage.	OK	OK
Approved CDM methodology approach only_Paragraph 41_Not applicable				
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	In the PDD the approach of estimation of emissions in the baseline scenario and in the project scenario is indicated. CAR 36. Please, check the numbering of tables in Section E of the PDD and make corresponding corrections.	CAR 36	OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)?	PDD provides estimates of: (a) Emissions in the project scenario (Section E.1) (b) Leakage (Section E.2) (c) Emissions in the baseline scenario (Section E.4) (d) Emission reductions adjusted by leakage (Section	OK	OK



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	E.6).		
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? (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?	(a) Estimates in 43 are given on the periodic basis, in tonnes of CO ₂ equivalent, on a source-by-source basis, before, during and after the crediting period. (b) The formulae used in PDD are consistent. (c) Key factors influencing baseline emissions and activity level of the project and risks associated with the project are taken into account, as appropriate. (d) Data sources used to calculate the estimates are clearly identified, reliable and transparent. (e) Emission factors were not used.	OK	OK



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	<p>(v) In tonnes of CO₂ equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol?</p> <p>(b) Are the formulae used for calculating the estimates in 43 or 44 consistent throughout the PDD?</p> <p>(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?</p> <p>(d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent?</p> <p>(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?</p> <p>(f) Is the estimation in 43 or 44 based on conservative assumptions and the most</p>	<p>(f) Estimation in 43 is based on conservative assumptions and the most plausible scenario in a transparent manner.</p> <p>(g) Estimates in 43 are consistent throughout the PDD.</p> <p>(h) The annual average of estimated emission reductions are calculated correctly (by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve).</p>		


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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed de facto, does the PDD include an illustrative forecasted emissions or net removals calculation?	Baseline emission level is calculated using the specific approach employing elements of "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" (Version 01.1.0). Forecasted emissions calculation is clearly provided in the PDD.	OK	OK
Approved CDM methodology approach only_Paragraphs 47(a) – 47(b)_Not applicable				
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in	The environmental impacts of the project have been sufficiently described	OK	OK



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	accordance with procedures as determined by the host Party?			
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?	CL 08. Please, provide reference to the Law of Ukraine "On environmental protection", in Section F.1.	CL 08	OK
Stakeholder consultations				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	Ltd "Obriy-MTS-Rozdylna" informed the community through mass media. All comments received were positive. No negative comments on the project have been reported.	OK	OK
Determination regarding small-scale projects (additional elements for assessment)				



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Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
Determination regarding programmes of activities (additional/alternative elements for assessment)				



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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 participants' responses	Determination team conclusion
CAR 01. Please, add information on the core activities of the company to Section A.2.	A.2	The core activity of the company is growing, processing, storage and sale of agricultural products. The relevant information is provided in Section A.2. of the PDD version 02.	The relevant information is provided, the issue is closed.
CAR 02. Please, specify the date of obtaining of a letter of support.	A.2	25/07/2012 is a date of obtaining of a Letter of Endorsement from the State Environmental Investment Agency of Ukraine	The information on the date of signing of the contract is presented in Section A.2. of the PDD version 02. The issue is closed.
CAR 03. Please, state the project starting date in Section A.2. of the PDD.	A.2	The date of signing of the equipment purchase contract (the starting date of the project) is 28/05/2012.	The information is provided, the issue is closed.
CAR 04. Please, indicate all the project participants in Section A.3 of the PDD.	A.3	The parties involved in the project are: Ltd "Obriy-MTS-Rozdylna" (Ukraine, the Host party), LHCarbon OÜ (Estonia).	The information is provided, the issue is closed.
CAR 05. Please, provide direct telephone numbers of the project participants in Annex 1.	A.3	The information is provided in Annex 1 to the PDD version 02.	The information is provided, the issue is closed.



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 06. Please, provide details on the location of the project.	A.4.1.4	The Joint Implementation project is planned to be carried out at the farmlands of Ltd "Obriy-MTS-Rozdylna", farmland facilities of Rozdilnanskyi district: Yakovlivska I/c, Starostynska I/c, Kosharska I/c, Poniativska I/c, Kamianska I/c.	The necessary information is provided, the issue is closed.
CAR 07. Please, provide information on possible crop rotation schemes planned by the project activities, in Section A.4.2.	A.4.2	The information on possible crop rotation schemes planned by the project activities is presented in Table 5 of the PDD.	The information was provided in Section A.4.2. The issue is closed.
CAR 08. Please, provide information on soil compaction removal methods.	A.4.2	Compaction shall be eliminated with a chisel plough or other deep tillage tools. The information is presented in Section A.4.2. of the PDD version 02.	The information is provided, the issue is closed.
CAR 09. Please, provide correct reference to the John Deere 7000 No-Till Box Drill manufacturer's website.	A.4.2	The reference to the John Deere 7000 No-Till Box Drill manufacturer's website is provided in Section A.4.2. of the PDD version 02.	The reference is provided in the relevant section, the issue is closed.
CAR 10. Add units of measurement to the description of Montana PARPUDA MA 2627M Self Propelled Sprayer.	A.4.2	Fuel tank capacity – 2600 l. Sprayer boom – 27 m. Engine capacity – 4.3 l. Engine rating – 169 kW/230 hp.	The units of measurement were provided, the issue is closed.
CAR 11. Please, provide explanation for Figure 2. of Annex 4 to the PDD.	A.4.2	Figure 2. of Annex 4 to the PDD shows John Deere 7000 No-Till Box Drill.	The information is provided, the issue is closed.



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 12. Please, provide the schedule of the project implementation in tabular form, state the work beginning and ending dates for every activity and stage of the project.	A.4.2	The schedule of the project implementation, where implementation stages and periods are stated, is presented in Table 6 of the PDD version 02.	The issue is closed, the information was verified.
CAR 13. The annual average emission reduction for 2008-2012 is calculated incorrectly. Please, make the necessary corrections.	A.4.3	The annual average emission reduction for 2008-2012 is 60 270 tonnes of CO ₂ equivalent.	The information is provided, the issue is closed.
CAR 14. In Section A.4.3.1., in the Table, providing the estimated amount of emission reductions for the period following the first commitment period (2013-2027), state the total estimated amount of emission reductions over the credit period in tonnes of CO ₂ equivalent.	A.4.3	The total estimated amount of emission reductions over the crediting period is expressed in tonnes of CO ₂ equivalent. The relevant corrections were made in the PDD version 02.	The issue is closed based on necessary changes made.
CAR 15. The project has no approval of the Host party and the country-participant.	19	To obtain the Letter of Approval the final Determination report that includes this Determination Protocol and the list of sources of Reference Information must be submitted to the State Environmental Investment Agency of Ukraine. The Letter of Approval of other country involved – country-participant has not been obtained so far as well.	CAR 15 shall be closed after the issuing of the Letter of Approval by the involved Parties.
CAR 16. The reference to “Tool for	23	The correct reference to “Tool for	The necessary changes were

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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
estimation of change in soil organic carbon stocks due to the implementation of afforestation/reforestation project activities" Version 01.1.0. is incorrect.		estimation of change in soil organic carbon stocks due to the implementation of afforestation/reforestation project activities" Version 01.1.0. is provided in the new version of the PDD.	made, the issue is closed.
CAR 17. Please, provide relevant conclusion after the description of all plausible baseline scenarios.	23	The analysis of all the alternatives described above shows that Alternative 1.1. is the most plausible one.	The relevant conclusion is presented, the issue is closed.
CAR 18. The description of index <i>D</i> , indicating diesel fuel combustion system in the third formula, is irrelevant as there is no variable with such index there.	24	The irrelevant information was removed.	The issue is closed based on irrelevant information removed.
CAR 19. In formula 3, explain the multiplier 0.9, used in calculation of the baseline GHG emissions due to application of baseline land cultivation technology.	24	0.9 is a coefficient of conservatism, which compensate for possible emissions in the project scenario owing to creating anti-fire furrows and minimal topsoil disturbance in the course of the direct sowing technology implementation.	The issue is closed as necessary information were provided.
CAR 20. Please, provide description of index <i>p</i> for the fourth formula in Section B.1. of the PDD.	24	Index [<i>p</i>] complies with the project technology system.	The information is provided, the issue is closed.
CAR 21. Please, provide information on parameter $K_{p,i,y}$ in Section B.1.	24	The information on parameter $K_{p,i,y}$ is provided in Section B.1. of the new version of the PDD.	The issue is closed as necessary information were provided.



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 22. Please, state the measurement/monitoring frequency for parameter ρ_i .	24	The measurement/monitoring frequency for parameter ρ_i is set for every field i before the commencement of the project.	The issue is closed as necessary information were provided.
CAR 23. The sum of investment stated in the PDD doesn't correspond to the sum of investment stated in Supporting document 2.	28	The project requires investment of approximately 700 thousand euros (according to the NBU rate). The relevant corrections were made in the new version of the PDD.	The corrections were made, the issue is closed.
CAR 24. The calculation presented in Supporting document 2 is made for 2006-2026, whereas the project's closing date is 2027. Please, correct the investment analysis.	28	The investment analysis was re-conducted.	The calculation was re-conducted, the issue is closed.
CAR 25. In Section B.2. of the PDD, it is stated that effective discount rate is adjusted by inflation index for Eurozone. The discount rate is not subject to inflation adjustments. Please, make the necessary corrections.	28	Cash flow is adjusted by inflation index for Eurozone in 2006.	The necessary corrections were made, the issue is closed.
CAR 26. Risk premium for the country is set for 2005, whereas the project starts at the end of 2006. Please, state the relevant premium for 2006.	28	The investment analysis of the given project was readjusted according to the commentary. Ref. to Supporting document 2 and the PDD version 02.	The necessary corrections were made, the issue is closed.
CAR 27. In Table 13. of the PDD the revenue of the company is expressed in hryvnias, whereas the calculations are made in euros. Please, make the relevant	28	The relevant corrections were made in Table 13. of Section B.2. of the PDD.	The necessary corrections were made, the issue is closed.



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
corrections.			
CAR 28. The number of months of the crediting period is incorrect.	34(c)	The crediting period duration, expressed in years and months, is 20 years, or 240 months: 01/01/2008-31/12/2012 (5 years, or 60 months), upon prolongation of the Kyoto Protocol: 01/01/2013- 31/12/2027 (15 years, or 180 months).	The limits of the credit period are set in Section C of the PDD. The issue is closed.
CAR 29. Please, provide description of parameter $k_{b,i,y}$ in Section D.1.1.3.	36(a)	The relevant description is provided. Ref. to the new version of the PDD.	The relevant description is provided, the issue is closed.
CAR 30. Please, check data units of monitoring data and parameters in Sections D.1.1.1 and D.1.1.3 of the PDD in accordance with the formulae.	36(b)	The units of measurement of monitoring data and parameters are verified, corrections made in Sections D.1.1.1 and D.1.1.3 of the PDD.	The corrections are accepted, the issue is closed.
CAR 31. Please, provide information on the source of data for parameter ρ_i , in Section D.1.1.3.	36(b)	The information on the source of data for parameter ρ_i is presented in Section D.1.1.3. of the new version of the PDD.	The information is provided, the issue is closed.
CAR 32. Please, number all formulae in Section D of the PDD.	36 (b) (ii)	All the formulae, presented in Section D of the PDD version 02, were numbered.	The issue is closed based on necessary changes made.
CAR 33. All the values of baseline and project emissions as well as emission reductions under the project are to be stated in tonnes of CO ₂ equivalent. Please, make	36 (b) (ii)	All amounts of baseline and project emissions and emission reductions resulting from the project are expressed in tonnes of CO ₂	The issue is closed based on necessary changes made.

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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
the relevant corrections in the formulae provided in Section D.		equivalent. Ref. to the PDD version 02.	
CAR 34. Please, add to the information on data collection and archiving, in Section D.1.1.	36 (b) (iii)	In Sections D.1.1.1. and D.1.1.3., data collection form and form, in which information will be archived, are indicated.	The information is provided, the issue is closed.
CAR 35. In Section D.2. of the PDD provide information on parameter $S_{p,i}$.	36 (i)	Information on parameter $S_{p,i}$ is provided in Section D.2. of the new version of the PDD.	The information is provided, the issue is closed.
CAR 36. Please, check the numbering of tables in Section E of the PDD and make corresponding corrections.	42	The table numbering in Section E. is verified. The necessary corrections were made.	The corrections were made, the issue is closed.
CL 01. Please, provide explanation on the use of chemical and biological methods of weed control.	A.4.2	The project provides for two methods of weed control: Chemical method. This method is based on chemical destruction or inhibition of weed development. Biological method. This method is based on crop protection from a wide range of fungal and bacterial diseases. For details ref. to Section A.4.2. of the PDD version 02.	The explanation was provided, the issue is closed.
CL 02. Please, provide information on re-equipment in the course of the project activities.	A.4.2	In the course of the project, substitution of the project activities with any other activity is not provided	The issue is closed as the necessary explanations were provided.



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
		for, as the given technology meets all the modern requirements of agricultural activity.	
CL 03. Please, provide information regarding the advisability of special training of personnel.	A.4.2	The project provides for the use of modern equipment of John Deere production. Operation of this equipment requires appropriate initial training. All staff will be trained to meet the needs of working with new equipment.	The issue is closed as the necessary explanations were provided.
CL 04. Please, provide a brief description of John Deere 8530 tractor.	A.4.2	John Deere 8530 is a third-class power rating tractor designed for operation in plant farming, feed industry and transport. Great weight and extended wheelbase of these tractors provide not only the longitudinal stability, but also increase the traction-grip performance while working with tillage machinery such as ploughs, chisel ploughs, cultivators, disk harrow, etc. Broader wheels, as compared to other such items of agricultural machinery, allows for lower soil compaction. For details ref. to Section A.4.2 of the PDD version 02.	The relevant equipment description is provided, the issue is closed.
CL 05. Please, provide explanation of the	A.4.2	The use of John Deere and Belarus	The explanation is sufficient, the



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
practicability of the use of John Deere and Belarus technological equipment in the project activities.		machinery will ensure optimization of agricultural equipment operation in the field, reduce the number of technological procedures, which entails lower diesel fuel consumption and lower GHG emissions into the atmosphere.	issue is closed.
CL 06. Please, provide reference to the Law of Ukraine "On the basic principles of the governmental agrarian policy for the period until 2015".	28	The reference to the Law of Ukraine "On the basic principles of the governmental agrarian policy for the period until 2015" is provided in the new version of PDD.	The issue is closed based on the relevant reference provided.
CL 07. Please, specify whether there are any mandatory government programs or policy which provide for mandatory implementation of No-till technologies by agricultural farms.	29 (c)	There are no programmes or policies to bind Ltd "Beta-Agro-Invest" to implement No-till technologies; there are no legislative restrictions of the baseline scenario either. The detailed information was provided in Section B.	The explanation is sufficient, the issue is closed.
CL 08. Please, provide reference to the Law of Ukraine "On environmental protection", in Section F.1.	48(b)	The reference is provided in the new version of PDD.	The issue is closed based on the relevant reference provided.