VERIFICATION REPORT
"UNIPLYT" LTD

VERIFICATION OF THE
"UTILIZATION OF WASTE WOOD FOR STEAM PRODUCTION AT "UNIPLYT" LTD WOOD-WORKING AND FIBREBOARD PLANT"

REPORT NO. UKRAINE-VER/0462/2012

REVISION NO. 01

SECOND PERIODIC VERIFICATION FOR PERIOD 01/11/2010-31/12/2011

BUREAU VERITAS CERTIFICATION

Report No: UKRAINE-ver/0462/2012

VERIFICATION REPORT "UTILIZATION OF WASTE WOOD FOR STEAM PRODUCTION AT "UNIPLYT" LTD WOOD-WORKING AND FIBREBOARD PLANT"

Date of first issue:	Organizational unit:
14/05/2012	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
"Uniplyt" Ltd	Joao Rodriques Markes Batista

Summary:

Bureau Veritas Certification has made the 2nd periodic verification of the "Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant", JI Registration Reference Number UA1000220, project of "Uniplyt" Ltd located in Vygoda village, Dolyna district, Ivano-Frankivsk region, Ukraine, and applying the methodology AM0036 version 2.1, 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 verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the monitoring report against 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 verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the verification process is a list of Clarification, Corrective Actions Requests, Forward Actions Requests (CR, CAR and FAR), presented in Appendix A.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 42890 tonnes of CO_2 equivalent for the monitoring period from 01/11/2010 to 31/12/2012.

Report No.:	Subject Group:
UKRAINE-ver/0476/2012	JI

Project title:
"Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant"

Work carried out by:
Oleg Skoblyk – Team Leader, Lead verifier
Vyacheslav Yeriomin – Team Member, verifier

Work reviewed by:
Ivan Sokolov - Technical Reviewer
Volodymyr Kulish – Technical Specialist

Work approved by:
Ivan Sokolov - Operational Manager

Bureau Veritas Certification Holding SAS

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1 INTRODUCTION

Uniplyt Ltd has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant" (hereafter called "the project") at Vygoda village, Dolyna district, Ivano-Frankivsk region, Ukraine.

This report summarizes the findings of the verification 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

Verification is the periodic independent review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period.

The objective of verification can be divided in Initial Verification and Periodic Verification.

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

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3 Verification Team

The verification team consists of the following personnel:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Verifier

Vyacheslav Yeriomin
Bureau Veritas Certification Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

Volodymyr Kulish
Bureau Veritas Certification, Technical Specialist

2 METHODOLOGY

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

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

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

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

2.1 Review of Documents

The Monitoring Report (MR) submitted by "Uniplyt" Ltd and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), Approved CDM methodology AM0036 version 2.1 and/or Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version 2.2 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 16/04/2012 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 "Uniplyt" Ltd and Scientific Engineering Centre "Biomass" were interviewed (see

References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
"Uniplyt" Ltd	- Organizational structure - Responsibilities and authorities - Roles and responsibilities for data collection and processing - Installation of equipment - Data logging, archiving and reporting - Metering equipment control - Metering record keeping system, database - Training of personnel - Quality management procedures and technology - Internal audits and check-ups
CONSULTANT Scientific Engineering Centre "Biomass"	- Monitoring plan - Monitoring report - Deviations from PDD - ERUs calculation model

2.3 Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the verification 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 GHG emission reduction calculation.

If the Verification Team, in assessing the monitoring report and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to the monitoring requirements, it should raise these issues and inform the project participants of these issues in the form of:

(a) Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;

(b) Clarification request (CL), requesting the project participants to provide additional information for the Verification Team to assess compliance with the monitoring plan;

(c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

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

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

The findings from the desk review of the original monitoring documents and the findings from interviews during the follow up visit are described in the Verification 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 Verification Protocol in Appendix A. The verification of the Project resulted in 5 Corrective Action Requests, 5 Clarification Requests, and 0 Forward Action Requests.

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

3.1 Remaining issues and FARs from previous verifications

No FARs are available from previous verification

3.2 Project approval by Parties involved (90-91)

The Project was approved by Host Party (Ukraine). Letter of Approval has been issued by National Environmental Investment Agency of Ukraine (12/02/2010, # 123/23/7). The Project obtained the Letter of Approval from foreign country (United Kingdom of Great Britain and Northern Ireland) acting as the project participant dated 3rd of December 2010 # CCIISICAR/01/2010.
The abovementioned written approvals are unconditional.

CL01 and its resolution/conclusion applicable to the written project approvals are provided in the Appendix A (table 2) below.

3.3 Project implementation (92-93)

The project "Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant" main goal consist in replacement of the heat-generators (steam boilers) working on natural gas by the boilers working on waste wood. Heat energy is used for technological needs. Installed heat capacity of Vyncke boiler is 13300 KW (steam pressure 20 Bar, temperature 250C, steam output 12 tons/hour to fiberboard shop and 6 ton to grinder shop). Key parameters of installed boiler (heat capacity, steam pressure or temperature, steam output) have not been changed during the monitoring period.
No additional equipment has been installed during the monitoring period. The boiler house is continuously in work, excluding periods of planned prophylactic repairs. Table concerning data on project repair's stops is provided in the section 1.2 of the Monitoring Report.

The PDD indicates that old gas-fired heat boilers will be used as reserve in the case of unforeseen circumstances. Old heat boilers have been dismantled during the monitoring period. So, when waste wood boiler was cold, work process was stopped on all plant. Boiler Vyncke was equipped by gas burner, in case of waste wood absence. Natural gas was consumed only for boiler ignition, and is in consistency with boiler stops.

No technical disasters or emergency stops have been observed at the project site during current monitoring period.

The difference between ERUs indicated in the PDD and in the monitoring report explains in the next way:
- PDD indicates that two waste wood burning boilers must be installed in frames of project activity. According to the PDD capacity of boiler house installed in the Vygoda village is about 30 000 tons of CO2 eq. per year, capacity of boiler in the Dzvinyach village is about 15 000 tons of CO2 eq. per year. Due to the lack of financing building of boiler house in Dzvinyach village was suspend on uncertain time, so values of ERUs obtained in the project was expected on level about 30000.
- During the monitoring period wood working plant expand production of fiberboard, so, steam consumption has been expanded and additional quantities of waste wood have been burnt. Additional waste wood replace natural gas, so higher level of emission reductions is achieved.

CAR01, CAR02, CL02 and their resolutions/conclusions applicable to the project implementation status are provided in the Appendix A (table 2) below.

3.4 Compliance of the monitoring plan with the monitoring methodology (94-98)

The monitoring occurred in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website.

For calculating the emission reductions, key factors, such as availability of main fuel (waste wood), prices on natural gas, diesel fuel and electricity, production activity level of fibreboard manufacturing, 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 emission reductions, such as work forecasts, bookkeeper's invoices, are clearly identified, reliable and transparent.

Emission factors, including default emission factors, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. Project developer uses emission factors for electricity consumptions, natural gas burning and oxidation of diesel fuel in accordance with National GHG Inventory Report, provided by Ukrainian DFP.

The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.

Project developer uses for emission reduction calculations only value of consumed active electric energy. Clarification on this issue was provided in the monitoring report version 2.1. Conservativeness of proposed approach is justified in appropriately way.

The monitoring periods per component of the project are clearly specified in the monitoring report and do not overlap with those for which verifications were already deemed final in the past.

CAR03, CL03, CL04 and their resolutions/conclusions applicable to the Compliance of the monitoring plan with the monitoring methodology are provided in the Appendix A (table 2) below.

3.5 Revision of monitoring plan (99-100)

"Not applicable"

3.6 Data management (101)

The data and their sources, provided in monitoring report, are clearly identified, reliable and transparent. The data monitored in project activity is obtained by direct measuring from measuring devices or calculated based on measuring. All data is cross-checked.

The implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures.

The function of the monitoring equipment, including its calibration status, is in order.
Calibration of measuring equipment, applicable to boiler house (temperature and pressure meters, water flow meters) is provided by State Enterprise "Ivano-Frankivsk Scientific-Production Centre of Standardisation, Metrology and Certification".
Electric energy meters for technological consumption account are calibrated by representatives of JSC "Prykarpattyaoblenergo" in frames of servicing work on the substation.
Gas meter LG-K-100-1/30-1,6-1 with auxiliary measuring equipment (pressure and temperature meters, gas corrector) is in property of "Uniplyt" LLC. Outstanding gas measuring unit is calibrated by State Enterprise "Ivano-Frankivsk Scientific-Production Centre of Standardisation, Metrology and Certification" representatives.
Measuring of waste wood parameters (moisture and value) provided by representatives of "Uniplyt" LLC laboratory. Fuel samples are analysed in accredited chemical laboratory of PJSC "Ivano-Frankivsk Cement" three times in year and data obtained used for fuel data cross-checking.

Value of consumed fuel is obtained from technical passports of used tracks and length of approved pathways (see list of attached documents).

The evidence and records used for the monitoring are maintained in a traceable manner. Scheme of data flow included in the section D of the determined PDD is adequate and work.

The data collection and management system for the project is in accordance with the monitoring plan.

Project monitoring process is a part of routine monitoring provided as usual operations at wood-working plant

CAR04, CAR05, CL04 and their resolutions/conclusions applicable to the project data management are provided in the Appendix A (table 2) below.

3.7 Verification regarding programmes of activities (102-110)

"Not applicable"

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the 2nd periodic verification of the "Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant" Project in Vygoda village, Dolyna district, Ivano-Frankivsk region, Ukraine, which applies the methodology AM0036 version 2.1. The verification 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 verification consisted of the following three phases: i) desk review of the monitoring report against 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 verification report and opinion.

The management of "Uniplyt" Ltd is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring Plan indicated in the final PDD version 02. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 2.2 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

Bureau Veritas Certification can confirm that the GHG emission reduction is accurately calculated and is free of material errors, omissions, or misstatements. Our opinion relates to the project's GHG emissions and resulting GHG emissions reductions reported and related to the approved project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated, we confirm, with a reasonable level of assurance, the following statement:

Reporting period: From 01/11/2010 to 31/12/2011

Baseline emissions	: 44877	tonnes of CO2 equivalent.
Project emissions	: 1987	tonnes of CO2 equivalent.
Emission Reductions	: 42890	tonnes of CO2 equivalent.

5 REFERENCES

Category 1 Documents:
Documents provided by "Uniplyt" Ltd that relate directly to the GHG components of the project.

/1/ Project design document "Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant" version 02 dated 17/09/09
/2/ Monitoring Report "Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant" version 1.0 dated 04/04/2012
/3/ Monitoring Report "Utilization of waste wood for steam production at "Uniplyt" Ltd Wood-working and Fibreboard plant" version 2.2 dated 16/08/2012
/4/ Letter of Approval from National Environmental Investment Agency of Ukraine dated 12/02/2010 #123/23/7
/5/ Letter of Approval from United Kingdom of Great Britain and Northern Ireland dated 3/12/2010 # CCIISICAR/01/2010
/6/ ERUs calculation file "ERU_Calculation_Workbook-ENG.xls"

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

/1/ Steam boiler JNO-SUS prod. #6365, inv. #1718
/2/ Water deionization station
/3/ Fire grates emergency cooling pumps
/4/ Fire grates cooling pumps
/5/ Boiler Vynke burner
/6/ Ash-dump containers
/7/ Boiler Vynke technical-production data
/8/ Exhauster with electric drive
/9/ Overheated steam pipeline to RUTS thermal accumulator
/10/ Deaerator inv. #1721
/11/ Fuel supply system linear electric drivers
/12/ Fuel supply system conveyor belt
/13/ Cold water meter LL50X #
/14/ Gas meter G400-LG-K-100-1/30-1,6-1
/15/ Gas meter OE with state calibration mark
/16/ Photo: Steam discharge
/17/ Overheated steam steamline on RUTS
/18/ Fuel warehouse entrance
/19/ Fuel transporters
/20/ Fuel transporting belt to boiler house
/21/ Vyncke boiler-house trackers logbook on shifts acceptance-transmittance

/22/ Fuel warehouse
/23/ Fuel loader
/24/ Vyncke boiler-house operators logbook on shifts acceptance-transmittance
/25/ Vyncke boiler-house operating software interface
/26/ Vyncke boiler-house fuel acceptance logbook
/27/ Automobile transport calibration table
/28/ Table on wood waste solid-volume ratio
/29/ Boiler Vyncke fuel distribution report
/30/ Boiler Vyncke fuel supply information note dated 31/11/2011
/31/ Boiler Vyncke fuel supply information note dated 30/09/2011
/32/ Boiler Vyncke fuel supply information note dated 31/08/2011
/33/ Boiler Vyncke fuel supply information note dated 31/07/2011
/34/ Certificate on boiler house Vyncke conformity of project documentation, dated 29.09.2009
/35/ Table on conformity between fuel calorific capacity and humidity, provided by boiler developer
/36/ Fuel mix table
/37/ Boiler Vyncke fuel supply information note dated 30/11/2010
/38/ Boiler Vyncke fuel supply information note dated 01/12/2010
/39/ Fuel consumption information note
/40/ Order #45 dated 10/02/2012 on pathway approval
/41/ Protocol #2T062-033.PV.11 dated 12/09/2011 on fuel samples heat value identification
/42/ Power department production forecast for August 2011
/43/ Power department report on August 2011
/44/ Power department production forecast for February 2011
/45/ Power department production forecast for August 2011
/46/ Power department production forecast for October 2011
/47/ Power department report on February 2011
/48/ Power department report on December 2011
/49/ Power department production forecast for December 2011
/50/ Bookkeepers reports 2009-2010
/51/ Water meter LL DN50 prod.#000583 passport
/52/ Gas compensator OE-VPT 0,68/60 #29071 passport
/53/ Pressure meter DeltebarS #593 calibration certificate dated 30/05/2011
/54/ Pressure meter DeltebarS #593 calibration protocol dated 30/05/2011
/55/ Water meter LL DN50 prod.#000584 passport
/56/ Pressure meter CerabarS #9318B401052 prod.#595 calibration certificate dated 30/05/2011
/57/ Pressure meter CerabarS #9318B401052 prod.#595 calibration protocol dated 30/05/2011
/58/ Pressure meter CerabarS #9318B401052 prod.#596 calibration certificate dated 30/05/2011
/59/ Pressure meter CerabarS #9318B401052 prod.#596 calibration protocol dated 30/05/2011
/60/ Pressure meter DeltabarS #970093O109D prod.#594 calibration

certificate dated 30/05/2011

/61/ Pressure meter DeltabarS #970093O109D prod.#594 calibration protocol dated 30/05/2011

/62/ Pressure meter Pt100 #48197/1 70 prod.#598 calibration certificate dated 30/05/2011

/63/ Pressure meter Pt100 #52849/1.147 prod.#597 calibration certificate dated 30/05/2011

/64/ Pressure meter Pt100 #62848/1.148 prod.#601 calibration certificate dated 30/05/2011

/65/ Pressure meter RMC-131 prod. #9318B401052 passport and calibration certificate

/66/ Pressure meter prod. #95OTA80200 passport

/67/ Pressure meter MBS-3000 prod #060G14R passport

/68/ Pressure meter Pt100 #63044/1.3438 prod.#599 calibration certificate dated 30/05/2011

/69/ Pressure meter Pt100 #50000/1.00 prod.#600 calibration certificate dated 30/05/2011

/70/ Water meter ProvirL 72WEndrees-Hauser DN80 PN40 prod. # 2094802000 passport and calibration certificate

/71/ Temperature meter Pt-100 prod. #48197/1.13 passport and calibration certificate

/72/ Temperature meters Tb-100 passports

/73/ Temperature meter Pt-100 prod. #48197/1.62 and passport 48197/1.1 and calibration certificate

/74/ Temperature meter Pt-100 prod. #CCO2 3F05 TC2 #248/T passport and calibration certificate

/75/ Temperature meters Pt-100 prod. #CCO2 3F05 TBV and #CCO2 3F05 TBQ ##248/T and 247/T passport and calibration certificate

/76/ Temperature meters Pt-100 prod. #CCO2 3F05 TBR and #CCO2 3F05 TBS ##244/T and 245/T passport and calibration certificate

/77/ Temperature meters Pt-100 prod. #515068 #227/T passport and calibration certificate

/78/ Temperature meter Pt-100 prod. #48197/1.76 and 48197/1.39 ##225/T, 226/T passport and calibration certificate

/79/ Temperature meter Pt-100 prod. #45369/1.124 and 48197/1.73 ##2192/T, 220/T passport and calibration certificate

/80/ Temperature meter Pt-100 prod. #48197/1.20 and 48197/1.70 ##221/T, 222/T passport and calibration certificate

/81/ Pressure meter Pt-100 prod. #70653.01.020 #309/T, passport and calibration certificate

/82/ Temperature meter Pt-100 prod. #52847/1.20 ##708/T, passport and calibration certificate

/83/ Calibration certificate on pressure meter CerabarT prod.#9318B601052, inst #238/T

/84/ Calibration certificate on pressure meter CerabarT prod.#9318B401052, inst #239/T

/85/ Calibration certificate on temperature meter CoupleS prod.#48902/1.3, inst #310/T
/86/ Calibration certificate and protocol on temperature meter FisherS prod.#705159.01.005, inst #308/T
/87/ Calibration protocol on gas corrector Flowcore-3, prod.#533
/88/ Calibration certificate and protocol on temperature meter PTP50J prod.#2804213, inst #228/T
/89/ Calibration certificate on pressure meter MBS3000 prod.#060G413, inst #751/T
/90/ Calibration certificate and protocol on pressure meter MBS3000 prod.#060G412, inst #752/T
/91/ Calibration certificate and protocol on pressure meter CerabarT prod.#8103E701052, inst #711/T
/92/ Calibration certificate and protocol on pressure meter CerabarT prod.#AB00C901052, inst #710/T
/93/ Calibration certificate on temperature meter Pt100 prod.#52849/1.148 and #52849/1.123, inst #706/T and707/T
/94/ Calibration certificate on temperature meter Pt100 prod.#52849/1.131 and #52849/1.127, inst #704/T and705/T
/95/ Reactive energy meter SR4U-I870M #63499
/96/ Active energy meter SAZU-S670M #37177
/97/ Reactive energy meter SR4U-I870M #436931
/98/ Active energy meter SAZU-S670 #904415
/99/ Substation 35/6 KV entrance
/100/ Humidity meter
/101/ Report on energy, fuel and heat energy consumption for 2010
/102/ Report on energy, fuel and heat energy consumption for January – June 2011
/103/ Report on energy, fuel and heat energy consumption for 2011
/104/ Report on energy, fuel and heat energy consumption for January – June 2010
/105/ Report on atmosphere protection for 2011 (2-tp form)
/106/ Report on atmosphere protection for 2010 (2-tp form)
/107/ Invoice #6500037918 dated 08/07/2011 on electric equipment service
/108/ Invoice #6500037473 dated 10/06/2011 on electric equipment service
/109/ Invoice #6500036197 dated 17/03/2011 on electric equipment service
/110/ Invoice #6500034765 dated 13/12/2010 on electric equipment service
/111/ Letter 007/7038 dated 14/12/2010 obtained from Prykarpattyaoblenerho on electric equipment service in December 2010
/112/ Monthly Certificate on Natural gas calorific value, 02/11/2010
/113/ "Uniplyt" LLC electricity consumption, December 2011
/114/ "Uniplyt" LLC electricity consumption, September 2011
/115/ "Uniplyt" LLC electricity consumption, June 2011
/116/ "Uniplyt" LLC electricity consumption, February 2011
/117/ "Uniplyt" LLC electricity consumption, December 2010
/118/ Monthly Certificate on Natural gas calorific value, January-December 2011

Persons interviewed:

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

/1/ Volodymyr Pylypiv – Head of Heat Energy Department
/2/ Svitlana Balashuk – Head of Technology Department
/3/ Mar'iana Holovata – Engineer-Constructor of Mechanic Department
/4/ Tetyana Boitzeva – Head of Labor Safety and Environmental Department
/5/ Olena Bukovtzeva – Engineer-Laborer of Heat Energy Department
/6/ Boitzev Dmytro – Master of Metrology Department
/7/ Vasyl Dudyrivka – head of Energy Department
/8/ Natalia Tatarenko – Head bookkeeper
/9/ Oleksiy Epik – project manager, Scientific Engineering Centre "Biomass"

APPENDIX A: VERIFICATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

VERIFICATION PROTOCOL

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project approvals by Parties involved				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	The Project has been approved by the Host Party, Letter of Approval #123/23/7 dated 12/02/2010 issued by National Environment Investment Agency of Ukraine, and the Party-buyer of ERUs (Great Britain) Letter of Approval CCIISICAR/01/2010 dated 3/12/2010 *CL01* Please indicate name of British DFP in the Section 1.4 of the Monitoring Report	CL01	OK
91	Are all the written project approvals by Parties involved unconditional?	All written project approvals are unconditional	OK	OK
Project implementation				
92	Has the project been implemented in	The project has been implemented in accordance	CAR01	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	with the PDD which determination has been deemed final *CAR01* Please explain difference between values of ERU indicated in the PDD and in the Monitoring Report *CAR02* Please indicate in the monitoring report if any work equipment or measuring devices associate with project activity was installed during the monitoring period	CAR02	OK
93	What is the status of operation of the project during the monitoring period?	The project is in work during the monitoring period *CL02* Please indicate in the MR if any stops or technical disasters had place during the monitoring period	CL02	OK
Compliance with monitoring plan				
94	Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	*CAR06* The ERUs calculations indicate that only active energy took into account. Please explain exclusion of reactive energy from calculations *CL03* ERUs calculations use NCV of natural gas consumed as a default factor. The project gas-supply company indicates NCV of natural gas in monthly reports. Please provide amendments of	CAR06 CL03 CL04	OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		monitoring plan or explain matters of NCV *CL04* The Vynke boiler house monthly reports indicate that the part of produced heat is used for boiler house own needs. Please explain exclusion of this heat from ERUs calculation		
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) above, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate?	The influencing the baseline emissions and project activity level key factors, as well as risk associated with the project are taken into account	OK	OK
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	The data sources are used for calculating emission reductions are clearly identified, reliable and transparent	OK	OK
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing	*CAR03* Please provide carbon emission factors, mentioned in the ERUs calculations, in line with "National GHG inventory report" or explain your statements	CAR03	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	accuracy and reasonableness, and appropriately justified of the choice?			
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	The calculations of emission reductions are based on conservative assumptions and the most plausible future scenarios in a transparent manner	OK	OK
Applicable to JI SSC projects only				
96	Is the relevant threshold to be classified as JI SSC project not exceeded during the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?	Not applicable	Not applicable	Not applicable
Applicable to bundled JI SSC projects only				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	Not applicable	Not applicable	Not applicable
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	a common monitoring report?			
98	If the monitoring is based on a monitoring plan that provides for overlapping monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring report? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	Not applicable	Not applicable	Not applicable
Revision of monitoring plan				
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	The project participants didn't provide revisions of monitoring plan during proposed monitoring period	OK	OK
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?	See section 99(a) of this protocol	OK	OK
Data management				
101 (a)	Is the implementation of data collection	*CAR04*	CAR04	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	Please clarify in the section 3.4 of the monitoring report biomass transportation procedure with clarification of average distance from biomass suppliers, tracks capacity metering and account of accepted biomass		
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	The function of monitoring equipment is in order. Metering equipment is in calibration interval. *CL05* Please clarify how project metering scheme was changed comparing with determined PDD	CL05	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidences and records used for the monitoring are maintained in a traceable manner	OK	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	*CAR05* Please note in the section D.3 of the MR that the data monitored and required for ERUs calculation will be kept two years after the last ERUs transfer with reference on relevant order issued by "Uniplyt" LLC	CAR05	OK
Verification regarding programmes of activities (additional elements for assessment)				
102	Is any JPA that has not been added to the JI PoA not verified?	Not applicable	Not applicable	Not applicable
103	Is the verification based on the monitoring reports of all JPAs to be	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	verified?			
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	Not applicable	Not applicable	Not applicable
104	Does the monitoring period not overlap with previous monitoring periods?	Not applicable	Not applicable	Not applicable
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	Not applicable	Not applicable	Not applicable
Applicable to sample-based approach only				
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into account that: (i) For each verification that uses a sample-based approach, the sample selection shall be sufficiently representative of the JPAs in the JI PoA such extrapolation to all JPAs identified for that verification is reasonable, taking into account differences among the characteristics	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	of JPAs, such as: − The types of JPAs; − The complexity of the applicable technologies and/or measures used; − The geographical location of each JPA; − The amounts of expected emission reductions of the JPAs being verified; − The number of JPAs for which emission reductions are being verified; − The length of monitoring periods of the JPAs being verified; and − The samples selected for prior verifications, if any?			
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	Not applicable	Not applicable	Not applicable
108	Has the AIE made site inspections of at least the square root of the number of total JPAs, rounded to the upper whole number? If the AIE makes no site	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?			
109	Is the sampling plan available for submission to the secretariat for the JISC ex ante assessment? (Optional)	Not applicable	Not applicable	Not applicable
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?	Not applicable	Not applicable	Not applicable

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR01 Please explain difference between values of ERU indicated in the PDD and in the Monitoring Report	92	The comparison analysis has been added in Section 1.2 of Monitoring Report.	Closed based on project developer clarifications

CAR02 Please indicate in the monitoring report if any work equipment or measuring devices associate with project activity was installed during the monitoring period	92	The appropriate information has been added to monitoring report (Section 1). The Order which confirms absence of any additional equipment and/or instruments implementation in frames of JI project activity has been issued by the enterprise.	The issue is closed
CAR03 Please provide carbon emission factors, mentioned in the ERUs calculations, in line with "National GHG inventory report" or explain your statements	95(c)	Carbon emission factors used in calculation are provided according to latest available National GHG Inventory Report of Ukraine 1990-2010	The issue is closed
CAR04 Please clarify in the section 3.4 of the monitoring report biomass transportation procedure with clarification of average distance from biomass suppliers, tracks capacity metering and account of accepted biomass	101(a)	The description of transportation procedure has been added in Section 3.4 of the monitoring report.	The issue is closed
CAR05 Please note in the section D.3 of the MR that the data monitored and required for ERUs calculation will be kept two years after the last ERUs transfer with reference on relevant order issued by "Uniplyt" LLC	101(d)	The appropriate statement has been added to the Monitoring Plan and Monitoring Report. The enterprise confirmed the storage period of monitoring data by the appropriate Order.	The issue is closed
CL01 Please indicate name of British DFP in the Section 1.4 of the Monitoring Report	90	The name of British DFP has been incorporated into the monitoring report for consistency	Closed based on MR amendments
CL02 Please indicate in the MR if any stops or technical disasters had place during the monitoring period	93	No stops and technical disasters occurred during monitoring period. The detailed spreadsheet of all stops of equipment included in project boundary is added in Section 1 for transparency.	The issue is closed

CL03 ERUs calculations use NCV of natural gas consumed as a default factor. The project gas-supply company indicates NCV of natural gas in monthly reports. Please provide amendments of monitoring plan or explain matters of NCV	94	Net calorific value of natural gas is received from the official certificates of natural gas supplier of the region. The sampling of certificates has been provided to verification team. The maximum value is taken for the calculation to follow conservativeness principle.	The issue is closed
CL04 The Vynke boiler house monthly reports indicate that the part of produced heat is used for boiler house own needs. Please explain exclusion of this heat from ERUs calculation	94	The exclusion of heat for Vyncke boiler house own needs has been made due to consideration of equivalent baseline and project scenario output product (heat). In baseline scenario only produced heat used for production purposes is considered so in project scenario the same heat should be considered. Own needs of gas fired boiler house that would provide heat in the absence of project activity as well as own needs of biomass boiler house are excluded which provide equivalent comparable amounts of useful heat produced by boiler houses for both baseline and project scenarios.	The issue is closed
CL05 Please clarify how project metering scheme was changed comparing with determined PDD	101(b)	Section 3.4 has been supplemented with appropriate clarification.	The issue is closed

CAR06 The ERUs calculations indicate that only active energy took into account. Please explain exclusion of reactive energy from calculations	94	Reactive power is not considered in project activity because equipment which generate additional reactive consumption is not included in JI project boundary. However, to make maximum transparency of calculation separate justification has been provided based on the materiality concept. The inclusion of reactive power into GHG emission reduction calculation showed that the resulting emissions in project scenario increases less than 5 % in comparison with project emissions without accounting of reactive power. According to materiality concept "…A materiality threshold of five percent shall be applied for projects with annual average emission reductions by sources (or enhancement of removals by sinks) amounting to less than 100,000 tonnes per year". The mentioned threshold is not exceeded even for total project scenario emission value and especially for total GHG emission reductions. The appropriate calculation where justification is done has been provided to verification team.	The issue is closed