VERIFICATION REPORT
JSC "IVANO-FRANKIVSK CEMENT"

VERIFICATION OF THE
IVANO-FRANKIVSK CEMENT SWITCH FROM WET-TO-DRY CEMENT AND FUEL SAVINGS FOR COAL DRYING

(FIFTH FOR THE PERIOD 01/01/2012-31/12/2012)

REPORT NO. UKRAINE-VER/0905/2013

REVISION NO. 01

BUREAU VERITAS CERTIFICATION

Report No: UKRAINE-ver/0905/2013

VERIFICATION REPORT IVANO-FRANKIVSK CEMENT SWITCH FROM WET-TO-DRY CEMENT AND FUEL SAVINGS FOR COAL DRYING

Date of first issue:	Organizational unit:
19/02/2013	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
JSC "Ivano-Frankivsk Cement"	Mykola Makoviychuck

Summary:

Bureau Veritas Certification has made the 5th periodic verification of the "Ivano-Frankivsk Cement switch from wet-to-dry cement and fuel savings for coal drying", JI Registration Reference Number UA1000100, project of JSC "Ivano-Frankivsk Cement" located in Yamnytsya village Tysmenytsya District, Ivano-Frankivsk Region, Ukraine, and applying the JI specific approach, 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 per determined changes. 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 149 522 tonnes of CO_2 equivalent for the monitoring period from 01/01/2012 to 31/12/2012.

Report No.:	Subject Group:	
UKRAINE-ver/0905/2013	JI	
Project title:		
Ivano-Frankivsk Cement switch from wet-to-dry cement and fuel savings for coal drying		
Work carried out by:		
Vyacheslav Yeriomin – Team Leader, Lead Verifier Serhiy Verteletskiy – Team member, Verifier		
Work reviewed by:		
Ivan Sokolov – Internal Technical Reviewer Vasyl Kobzar – Technical specialist		☒ No distribution without permission from the Client or responsible organizational unit
Work approved by:		
Ivan Sokolov - Operational Manager		☐ Limited distribution
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26/02/2013	01	25

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1 INTRODUCTION

JSC "Ivano-Frankivsk Cement" has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Ivano-Frankivsk Cement switch from wet-to-dry cement and fuel savings for coal drying" (hereafter called "the project") at Yamnytsya village Tysmenytsya 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 and 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:

Vyacheslav Yeriomin
Bureau Veritas Certification Climate Change Verifier
Serhii Verteletskiy
Bureau Veritas Certification Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification, Internal Technical Reviewer

Vasyl Kobzar
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 GreenStream Network Plc and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), and 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 02 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 14/02/2013 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 JSC “Ivano-Frankivsk Cement” were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
JSC "Ivano-Frankivsk Cement"	- 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 - IT management - Training of personnel - Quality management procedures and technology - Internal audits and check-ups
CONSULTANT GreenStream Network Plc	- 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 3 Corrective Action Requests, 0 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

There are no FARs available from 4th periodic verification, provided by Bureau Veritas Certification Holding SAS for period 01/01/2011-31/12/2011.

3.2 Project approval by Parties involved (90-91)

Written project approval by the Host Party has been issued by the National Environmental Investment Agency of Ukraine (Letter of Approval #1220/23/7 dated 14/10/2009). Written approvals by Sponsor Parties has been obtained from the Ministry of Environment Rural and Marine of Spain (Letter of Approval dated 2/12/2009) and the Ministry of Economic Affairs of The Netherlands (Letter of Approval #2009JI15, dated 10/12/2009)

The abovementioned written approval is unconditional.

3.3 Project implementation (92-93)

Before the project implementation cement manufacturing on JSC “Ivano-Frankivsk Cement” was based on three wet kilns.
The old wet kiln, with a 160 000 tonne clinker capacity, was decommissioned as part of the project activity while other two kilns are remained in operation while their production levels are gradually reduced as the dry kiln replaces their capacity. In addition to the wet-to-dry switch,

this component of the project also results in a capacity expansion of more than 500 000 tonnes of clinker.
The new kiln affects the whole production process, especially
a) crushing, storage, grinding and drying of raw materials,
b) raw meal silo and kiln feed system
c) the preheater, calciner and clinker cooler.
The project implementation results in energy consumption (and carbon emissions from fuel combustion per tonne of clinker) reduction compared with the wet process. Process changes in coal drying utilize waste heat from the new dry kiln to eliminate the need to use natural gas for the purpose of drying.
The dry kiln was put in operation in July of 2008 and the process of utilization of waste heat for drying coal that is used as fuel source in the kiln started in December of 2008. In 2012 the project continued to reduce the emissions resulting from the manufacturing at the Ivano-Frankivsk Cement location. The project improved efficiency of use of natural gas and electricity at the enterprise and thus leaded to decrease of harmful emissions.
The dry kiln was in exploitation during the whole monitoring period excluding the time needed for equipment maintenance. It was evidenced by the production-technological reports provided onsite (see the List of the Documents checked)

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

The monitoring occurred in accordance with the monitoring plan changed by the project developer. Project design corrections are adequate and described in the section E.6 of the Monitoring Report.

For calculating the emission reductions key factors, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account.
Key monitoring activities for each subproject are sufficiently described in the MR and no deviations from the monitoring algorithm were detected. The monitoring points, including parameter monitored, monitoring equipment and information concerning its calibration interval are clearly described in the section D 1.2 of the MR and completely correspond to the ones prospected in the determined PDD.

The data sources used for calculating emission reductions 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.

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

3.5 Revision of monitoring plan (99-100)

The monitoring plan has not been revised during the monitoring period. Revision of the project monitoring plan was provided during the 4th monitoring period from 01/01/2011 till 31/12/2011. The project developer provides revision of the monitoring plan. The proposed revision is adequate substantiated and improves the accuracy and applicability of the information been collected as compared with the initial monitoring plan without changing the conformity of the applicable rules and regulations on establishing the monitoring plan.
The change of initial monitoring plan is the use in calculations carbon dioxide emission factors for coal, natural gas, heavy fuel oil burning and electricity consumed from the grid in accordance with the "National GHG Inventory Report" developed by National Environment Investment Agency of Ukraine.
The changes that were introduced don't affect the conservative approach to emission reduction calculation and the procedure for data monitoring and collecting.
The management system is suitable for reliable monitoring of the project according to the proposed revision.

3.6 Data management (101)

A detailed records management system has been established at Ivano-Frankivsk Cement to record and document all required data. The monitoring information flow for each parameter to be monitored is sufficiently described in the section C of the MR. The records management system includes paper records maintained by staff of the laboratory and production staff as well as electronic records maintained by the departments.

Data collection and manipulation for the monitoring plan are the responsibility of four departments within the enterprise (Power and Electrical Department, Engineering and Metrologist Department, Laboratory, Shift man, shop economist and superintendant). The reporting procedures reflect the monitoring plan completely. The complete data is stored electronically and documented. The necessary procedures have been defined in the internal procedures.

The data and their sources, provided in the monitoring report, are clearly identified, reliable and transparent. 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. The evidence and records used for the monitoring are maintained in a traceable manner.

CAR01-CAR03 and their resolutions/conclusions applicable to project compliance of the monitoring are listed in the APPENDIX A: VERIFICATION PROTOCOL (Table 2) below

3.7 Verification regarding programmes of activities (102-110)

"Not applicable"

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the 5th periodic verification of the "Ivano-Frankivsk Cement switch from wet-to-dry cement and fuel savings for coal drying" Project in Yamnytsya village Tysmenytsya District, Ivano-Frankivsk Region, Ukraine, which applies the JI specific approach. 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 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 JSC "Ivano-Frankivsk Cement" 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 1.4. 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 02 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as per determined changes in 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 01/01/2012 to 31/12/2012

Baseline emissions	: 887 812	tonnes of CO2 equivalent.
Project emissions	: 738 290	tonnes of CO2 equivalent.
Emission Reductions	: 149 522	tonnes of CO2 equivalent.

5 REFERENCES

Category 1 Documents:
Documents provided by GreenStream Network Plc that relate directly to the GHG components of the project.

/1/ Project Design Document "Ivano-Frankivsk Cement switch from wet-to-dry cement and fuel savings for coal drying" version 1.4 dated 26/08/2009
/2/ Monitoring Report "Ivano-Frankivsk Cement switch from wet-to-dry cement and fuel savings for coal drying" version 01 dated 22/01/2013
/3/ Monitoring Report "Ivano-Frankivsk Cement switch from wet-to-dry cement and fuel savings for coal drying" version 02 dated 19/02/2013
/4/ ERUs calculation model "2012 IFC Data - calculations 29 01 2013 ob.xls"
/5/ Letter of Approval #1220/23/7 dated 14/10/2009 issued by National Environment Investment Agency
/6/ Letter of Approval #2009JI15 dated 10/12/2009 issued by Dutch Ministry of Economic Affairs
/7/ Letter of Approval dated 02/12/2009 issued by Ministry of Environment Rural and Marine of Spain

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

/1/ Passport and calibration certificate dust scales SHENCK MTD 1220(V51) #V002169.A01

/2/ Passport and calibration certificate dust scales SHENCK MTD 1220(V51) #V002169.A01

/3/ Passport and calibration certificate dust scales SHENCK MTD 1220(V51) #V002171.A01

/4/ Passport and calibration certificate dust scales DOSIMAT #76912

/5/ 4-mtp form, for energy materials and fuels use, for 2012 year

/6/ Passport and calibration certificate dust scales DOSIMAT #76912

/7/ Passport and calibration certificate dust scales DOSIMAT #76912.1

/8/ Passport and calibration certificate LOW system

/9/ Passport and calibration certificate INTERCONT PLUS conveyor scales

/10/ Passport and calibration certificates scales TVA #059

/11/ Passport and calibration certificates scales TVA #081

/12/ Passport and calibration certificates scales TVA #271

/13/ Passport and calibration certificates scales VPP PS-100 #0203

/14/ Passport and calibration certificates scales VC PS-150 #0204

/15/ Logbook #75 on dry clinker production technological control

/16/ Accreditation certificate #2T062 dated 16/06/2010 on JSC “Ivano-Frankivsk Cement” measuring laboratory, valid till 16/06/2013

/17/ Periodically attestation program on JSC “Ivano-Frankivsk Cement” testing facilities for 2012 year

/18/ Periodically attestation program on JSC “Ivano-Frankivsk Cement” testing facilities for 2013 year

/19/ Logbook #17 on raw material and clinker chemical analysis

/20/ Logbook #7 on sludge chemical analysis

/21/ Logbook #85 on dry clinker production technological control

/22/ Logbook #16 on raw material chemical analysis

/23/ Logbook #25 on coal input control and Logbook #29 on alternative fuel input control

/24/ Logbook #28 on coal mill output

/25/ Logbook #27 on coal milling output

/26/ pressure meter MIDA 13P #06421331

/27/ Production report on coal turnover December 2012

/28/ Kiln fuel consumption report December 2012

/29/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, December 2012

/30/ Production report, December 2012

/31/ Production report on coal turnover November 2012

/32/ Kiln fuel consumption report November 2012

/33/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, November 2012

/34/ Production report, November 2012

/35/ Production report on coal turnover October 2012

/36/ Kiln fuel consumption report October 2012

/37/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, October 2012

/38/ Production report, October 2012

/39/ Production report on coal turnover September 2012

/40/ Kiln fuel consumption report September 2012

/41/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, September 2012

/42/ Production report, September 2012

/43/ Production report on coal turnover September 2012

/44/ Kiln fuel consumption report September 2012

/45/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, September 2012

/46/ Production report, September 2012

/47/ Production report on coal turnover August 2012

/48/ Kiln fuel consumption report August 2012

/49/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, August 2012

/50/ Production report, August 2012

/51/ Production report on coal turnover July 2012

/52/ Kiln fuel consumption report July 2012

/53/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, July 2012

/54/ Production report, July 2012

/55/ Production report on coal turnover June 2012

/56/ Kiln fuel consumption report June 2012

/57/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, June 2012

/58/ Production report, June 2012

/59/ Production report on coal turnover May 2012

/60/ Kiln fuel consumption report May 2012

/61/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, May 2012

/62/ Production report, May 2012

/63/ Production report on coal turnover April 2012

/64/ Kiln fuel consumption report April 2012

/65/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, April 2012

/66/ Production report, April 2012

/67/ Production report on coal turnover March 2012

/68/ Kiln fuel consumption report March 2012

/69/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, March 2012

/70/ Production report, March 2012

/71/ Production report on coal turnover February 2012

/72/ Kiln fuel consumption report February 2012

/73/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, February 2012

/74/ Production report, February 2012

/75/ Production report on coal turnover January 2012

/76/ Kiln fuel consumption report January 2012

/77/ Report on turnover of raw materials and sludge in fuel preparation division of kiln section of cement department, January 2012

/78/ Production report, January 2012

/79/ Kiln #1 work report for July 2012

/80/ Kiln #2 work report for July 2012

/81/ Kiln #3 work report for July 2012

/82/ Kiln #3 fuel consumption for July 2012

/83/ Coal mill work report for July 2012

/84/ Raw material mill work report for July 2012

/85/ Kiln #1 work report for January 2012

/86/ Kiln #2 work report for January 2012

/87/ Kiln #3 work report for January 2012

/88/ Kiln #3 fuel consumption for January 2012

/89/ Coal mill work report for July 2012

/90/ Raw material mill work report for July 2012

/91/ Passport and calibration certificate of power meter Landys Gir #94 977 013

/92/ Passport and calibration certificate of power meter Landys Gir #94 977 026

/93/ Statement #163 on State metrological attestation of ASCMPC, dated 24/11/2010 valid till 24/11/2010

/94/ 11-mtp form for 2012 year

/95/ Form 24 – electric energy for 2012 year

/96/ Report on electricity consumption, January 2012
/97/ Report on electricity consumption, February 2012
/98/ Report on electricity consumption, March 2012
/99/ Report on electricity consumption, April 2012
/100/ Report on electricity consumption, May 2012
/101/ Report on electricity consumption, June 2012
/102/ Report on electricity consumption, July 2012
/103/ Report on electricity consumption, August 2012
/104/ Report on electricity consumption, September 2012
/105/ Report on electricity consumption, October 2012
/106/ Report on electricity consumption, November 2012
/107/ Report on electricity consumption, December 2012
/108/ Form 2tp – report on air protection for 2012 year

/109/ Statement on clinker control weighing for kiln #1, dated 17/01/2012

/110/ Statement on clinker control weighing for kiln #1, dated 12/04/2012

/111/ Statement on clinker control weighing for kiln #1, dated 10/07/2012

/112/ Statement on clinker control weighing for kiln #1, dated 23/10/2012

/113/ Statement on clinker control weighing for kiln #2, dated 08/02/2012

/114/ Statement on clinker control weighing for kiln #2, dated 16/05/2012

/115/ Statement on clinker control weighing for kiln #2, dated 22/08/2012

/116/ Statement on clinker control weighing for kiln #2, dated 11/12/2012

/117/ Statement on clinker control weighing for kiln #3, dated 17/10/2012

/118/ Statement on clinker control weighing for kiln #3, dated 21/07/2012

/119/ Statement on clinker control weighing for kiln #3, dated 14/04/2012

/120/ Statement on clinker control weighing for kiln #3, dated 23/01/2012

/121/ Cement manufacturing work and maintains training program

/122/ List of JSC “Ivano-Frankivsk Cement” measuring equipment, which must be calibrated, 10/01/2012

/123/ List of JSC “Ivano-Frankivsk Cement” measuring equipment, which must be calibrated, 29/02/2012

/124/ Order #301 On measuring equipment responsible persons at JSC “Ivano-Frankivsk Cement” assignment

/125/ Annex on measuring equipment responsible persons job description

/126/ Certificate on quality management system, # UA2.047.06121-11, issued 21/06/2011, valid till 21/06/2016

/127/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” January 2012

/128/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” February 2012

/129/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” March 2012

/130/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” April 2012

/131/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” May 2012

/132/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” June 2012

/133/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” July 2012

/134/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” August 2012

/135/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” September 2012

/136/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” October 2012

/137/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” November 2012

/138/ Natural gas consumption on PJSC “Ivano-Frankivsk Cement” December 2012

/139/ Statement on output production and realization in 2012 year (form 1P-NPP)
/140/ Certificate #353 dated 26/12/12 on natural gas quality
/141/ Certificate #347 dated 18/12/12 on natural gas quality
/142/ Certificate #342 dated 11/12/12 on natural gas quality
/143/ Certificate #300 dated 25/10/12 on natural gas quality
/144/ Certificate #294 dated 17/10/12 on natural gas quality
/145/ Certificate #288 dated 11/10/12 on natural gas quality
/146/ Certificate #283 dated 08/10/12 on natural gas quality
/147/ Certificate #278 dated 01/10/12 on natural gas quality
/148/ Certificate #255 dated 10/09/12 on natural gas quality
/149/ Certificate #242 dated 23/08/12 on natural gas quality
/150/ Certificate #237 dated 20/08/12 on natural gas quality
/151/ Certificate #229 dated 13/08/12 on natural gas quality
/152/ Certificate #219 dated 02/08/12 on natural gas quality
/153/ Certificate #183 dated 25/06/12 on natural gas quality
/154/ Certificate #176 dated 18/06/12 on natural gas quality
/155/ Certificate #168 dated 11/06/12 on natural gas quality
/156/ Certificate #163 dated 05/06/12 on natural gas quality
/157/ Certificate #124 dated 23/04/12 on natural gas quality
/158/ Certificate #107 dated 10/04/12 on natural gas quality
/159/ Certificate #98 dated 29/03/12 on natural gas quality
/160/ Certificate #36 dated 30/01/12 on natural gas quality
/161/ Certificate #33 dated 26/01/12 on natural gas quality
/162/ Certificate #30 dated 23/01/12 on natural gas quality
/163/ Certificate #23 dated 19/01/12 on natural gas quality
/164/ Certificate #14 dated 12/01/12 on natural gas quality
/165/ Certificate #7 dated 10/01/12 on natural gas quality
/166/ Passport and calibration certificate gas meter DELTA 2050/100 fabr.# K4795304.04

/167/ Passport and calibration certificates of pressure meter MIDA 13P #08425335

/168/ Passport and calibration certificates of pressure meter MIDA 13P #06421331

/169/ Passport and calibration certificate #368/T of temperature converter TSMU-0289 #003

/170/ Passport and calibration certificate #19/T of temperature converter TSMU-0289 #112697

/171/ Passport and calibration certificates of gas meter Universal 02 #1324

/172/ Statement on commercial accounting gas unit calibration, dated 10/01/2012

/173/ Statement on commercial accounting gas unit calibration, dated 12/04/2012

/174/ Statement on commercial accounting gas unit calibration, dated 02/02/2012

/175/ Statement on commercial accounting gas unit calibration, dated 08/06/2012

/176/ Statement on commercial accounting gas unit calibration, dated 07/08/2012

/177/ Passport and calibration certificates of gas meter G1600 type LG-K-200-1/30-1,6-1, fabr. #10187

/178/ Passport and calibration certificates of gas meter Universal #1352

/179/ Passport and calibration certificates of pressure meter MIDA 13P #08425338

/180/ Passport and calibration certificates of pressure meter MIDA 13P #07207241

/181/ Passport and calibration certificate #367/T of temperature converter TSMU-0289 #002

/182/ Passport and calibration certificate coal dust scales MULTIKOR K-40 #Z035031 B15 03-2007

/183/ Passport and calibration certificate coal dust scales MULTIKOR K-40 #Z043049.A01 2008

/184/ Passport and calibration certificate coal dust scales MULTIKOR K-40 #Z035031 B15 29-2007

/185/ Passport and calibration certificate coal dust scales MULTIKOR K-40 #Z953103 37 04 2007

/186/ Passport and calibration certificate dust scales MULTIDOS MTD 1015 T9 #V070446.B01

/187/ Passport and calibration certificate dust scales MULTIDOS MTD 1220 #V070447.B01

/188/ Passport and calibration certificate dust scales MULTIDOS MTD 1420 T9 #V070448.B01

/189/ Passport and calibration certificate dust scales MULTIDOS DEL 0820 T9 #1 BDD 0015

/190/ Passport and calibration certificate dust scales MULTIDOS DEL 0820 T9 #1 BDD 0014

/191/ Passport and calibration certificate dust scales MULTIDOS DEL 0820 T9 #1 BDD 0013

/192/ Passport and calibration certificate dust scales SHENCK MTD 1220(V51) #V002169.A01

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/ Oleg Yarema – Head of Technical Production Department
/2/ Vasyl Kalyn – Head of Metrology Department
/3/ Petro Kardash – Vice-Head of Power Department
/4/ Lesia Ivantsiv – Technologist
/5/ Iryna Heviuk – Head of Chemical Laboratory
/6/ Tetiana Hnyp - Economist
/7/ Mikhail Mikhnovskyi – representative of “GreenStream Network Plc”

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 written project approvals are mentioned in the MR. Letter of Approval #1220/23/7 dated 14/10/2009 has been issued by National Environment Investment Agency of Ukraine. Letter of Approval #2009JI15 dated 10/12/2009 has been issued by Ministry of Economic Affairs of the Netherlands and Ministry of Environemnt, Rural and Marine affairs of the Spain	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	All written approvals are unconditional	OK	OK
Project implementation				
92	Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	The project has been implemented in accordance with the Monitoring Report and determined PDD	OK	OK
93	What is the status of operation of the	The project was in operation during the monitoring	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	project during the monitoring period?	period. Data on work performance, stops and start-ups, are provided in the Monitoring Report		
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?	The monitoring was provided in line within the determined PDD which is available at JI UNFCCC website	OK	OK
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 key factors influenced the emission reductions are taken into account in appropriate way	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 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	Default emission factors used for calculations, are selected by carefully balancing accuracy and reasonableness, and the choice is appropriately justified	OK	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 calculation is adequate	OK	OK
Applicable to JI SSC projects only_Not applicable				
Applicable to bundled JI SSC projects only_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 monitoring plan has not been revised during the 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?	Not applicable	OK	OK
Data management				
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance	The implementation of data collection procedures is in accordance with the monitoring plan	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	procedures?			
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	*CAR01* Please add for the parameter $EL_{RM,y}$ in the section D.2.1 of the MR power meter at connection Industrial site #2 (Dubivtsi quarry) *CAR02* Please add scales for cement mill #4 in the list of project measuring equipment *CAR03* Please check names of scales DOSIMAT and DOSAX in the sub-section Raw material consumption in the section D.2.1 of the MR	CAR01 CAR02 CAR03	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidences and records are used in a traceable manner	OK	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	The data collection and management system is in accordance with the Determined Monitoring Plan	OK	OK
Verification regarding programmes of activities (additional elements for assessment)_Not applicable				
Applicable to sample-based approach only_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 add for the parameter $EL_{RM,y}$ in the section D.2.1 of the MR power meter at connection Industrial site #2 (Dubivtsi quarry)	101 (b)	*Response 01* Section D.2.1 of the monitoring report has been updated to add the power meter for the Industrial site #2 (Dubivtsi quarry).	The issue is closed
CAR02 Please add scales for cement mill #4	101 (b)	*Response 01* The monitoring report has been updated to add information on the scales for cement mill #4.	The issue is closed
CAR03 Please check names of scales DOSIMAT and DOSAX in the sub-section Raw material consumption in the section	101 (b)	*Response 01* Section D.2.1 of the monitoring report has been updated to specify correct names of the scales in the sub-section Raw material consumption.	The issue is closed