



BUREAU
VERITAS

CERTIFICATION

Reviewed

Init Olekun

Date: 01/09/2011

VERIFICATION REPORT

CARBON TRADE AND FINANCE SICAR S.A.

VERIFICATION OF THE

“PRODUCTION OF CONTINUOUSLY CASTED
SLAB STEEL BILLET BY ARC-FURNACE
TECHNIQUE AT OJSC MMK”

REPORT No. RUSSIA-VER/0149/2011

REVISION No. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

Date of first issue: 31/08/2011	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Carbon Trade & Finance SICAR	Client ref.: Mr. Ingo Ramming

Summary:

Bureau Veritas Certification has made the initial and the 1st periodic verification of the “Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”, JI Registration Reference Number 0242 project and applying the JI specific approach regarding baseline setting and additionality demonstration and assessment, 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 was commissioned by Carbon Trade & Finance SICAR S.A.

The verification scope is defined as a periodic independent review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period, 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 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 5 Corrective Actions Requests (CARs) 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 735,843 tons of CO₂eq for the initial and the 1st periodic monitoring period from January 1st 2008 to December 31st 2010.

Our opinion relates to the project's GHG emissions and resulting GHG emission reductions reported and related to the approved project baseline and monitoring, and its associated documents.

Report No.: RUSSIA-ver/0149/2011 rev.02	Subject Group: JI
Project title: “Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”	
Work carried out by: Andrey Rodionov – Lead Verifier	
Work reviewed by: Vera Skitina – Internal Technical Reviewer	
Work approved by: Leonid Yaskin – Operational Manager	
Date of this revision: 01/09/2011	Rev. No.: 02
Number of pages: 20	

☒ No distribution without permission from the Client or responsible organizational unit

☐ Limited distribution

☐ Limited distribution



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

Table of Contents	Page
1 INTRODUCTION	3
1.1 Objective	3
1.2 Scope	3
1.3 Verification Team	3
2 METHODOLOGY	4
2.1 Review of Documents	4
2.2 Follow-up Interviews	4
2.3 Resolution of Clarification, Corrective and Forward Action Requests	5
3 VERIFICATION CONCLUSIONS	6
3.1 Remaining issues and FARs from previous verifications	6
3.2 Project approval by Parties involved (90-91)	6
3.3 Project implementation (92-93)	7
3.4 Compliance of the monitoring plan with the monitoring methodology (94-98)	7
3.5 Revision of monitoring plan (99-100)	8
3.6 Data management (101)	8
3.7 Verification regarding programmes of activities (102-110)	9
4 VERIFICATION OPINION	9
5 REFERENCES	10
APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL	13



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

1 INTRODUCTION

Carbon Trade & Finance SICAR S.A. (hereafter called "CTF SICAR") has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK", (hereafter called "the project").

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 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 and/or corrective 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:

Andrey Rodionov

Bureau Veritas Certification, Lead Verifier

This verification report was reviewed by:

Vera Skitina

Bureau Veritas Certification, Internal Technical Reviewer



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

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 CTF Consulting (subsidiary of Carbon Trade & Finance SICAR S.A.) 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 to be checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report Version 1.1 dated 05 July 2011 /1/ and the project as described in the determined PDD /2/.

2.2 Follow-up Interviews

During onsite visit in the frame of the project determination on 17/08/2010, Bureau Veritas Certification verifier collected the actual data and conducted the interviews with representatives of the OJSC MMK and CTF Consulting (see the list of interviewees in Section 5) both for the stage of determination and as verification of the project. The main topics of the interviews are summarized in Table 1. Later in the frame of the project verification for accurate definition of the data and acquisition of the additional information the phone conferences were conducted.

Desk review approach has been applied for the verification on 08-13/08/2011.



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

Table 1. Interview topics related to verification

Interviewed organization	Date	Interview and/or inspected topics
OJSC MMK	17/08/2010 08-13/08/2011	<ul style="list-style-type: none"> ➤ Status of project equipment ➤ Revisions of Monitoring plan ➤ Collected data ➤ Passports and evidence of calibration of measuring equipment ➤ Data logs (samples) ➤ Data reports (samples) ➤ QC and QA procedures ➤ Use of calculation tool ➤ Emission calculations ➤ QC and QA procedures ➤ Monitoring report
CONSULTANT CTF Consulting	Ditto	Ditto
(Local Stakeholder)	N/A	N/A

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 AIE to assess compliance with the monitoring plan (were not raised in this assignment);



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

(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.

To guarantee the transparency of the verification process, the concerns raised are normally 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 Corrective 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.

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

3.1 Remaining issues and FARs from previous verifications

Not applicable.

3.2 Project approval by Parties involved (90-91)

The project has no approval by host Party.

The project has approval by Party B which was received on 1st June 2011 namely The Declaration of Approval from State of the Netherlands, acting through the Ministry of Economic Affairs, Agriculture and Innovation and its implementing agency "NL Agency", being the Designated Focal Point for Joint Implementation (JI) in The Netherlands /5/.

The abovementioned written approval is unconditional.

Outstanding issues related to Project approval by Parties involved (90-91), PP's response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CAR 01 and CAR 02).



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

3.3 Project implementation (92-93)

The implementation status of the project corresponds with implementation schedule of the determined PDD as described in Appendix A, paragraph 92, and the starting date of operation is 07/06/2004.

The progress of the proposed JI project achieved is steady. The arc-furnace complex with auxiliary equipment supporting its operation is commissioned and operating in line with implementation schedule of determined PDD.

Implementation of the equipment consisted of the following stages:

- Demounting three classic open hearth furnaces and commissioning LFA #1, two section CCMs #1, 2 in 2004;
- Demounting one DBSU, chemicals preparation plant, blooming mill plant (BMP) in 2005;
- Commissioning two electric arc furnaces (EAF) #1, 2, LFA #2 (reconstruction of SRA #1), one slab CCM #5 in 2006 /22/;
- Commissioning: LFA #3 in 2008.

The project started generation of emission reductions on 01/01/2008, as confirmed by measuring data in accordance with original monitoring plan of the determined PDD.

Outstanding issues related to Project implementation (92-93), PP's response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CAR 03).

The issued CAR 03 concerns the project implementation schedule.

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

The monitoring occurred in accordance with the original monitoring plan of the determined PDD which was revised against that provided in the PDD regarding which the determination has not been deemed final in the JI terms.

For calculating the emission reductions key factors such as the project specific consumption of materials, fuel and energy (refer to the PDD, Section D 1.1.2) were taken into account.

Data sources used for calculating emission reductions, as provided in Appendix A para 95 (b) are clearly identified, reliable and transparent /6-8/.



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

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 as described in Appendix A paragraph 95 (d).

Outstanding issues related to Compliance of the monitoring plan with the monitoring methodology (94-98), PP’s response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CAR 04 and CAR 05).

The issued CAR concern the evidence of initial data (CAR 05).

3.5 Revision of monitoring plan (99-100)

Monitoring of GHG emission reductions was carried out as per the Monitoring Plan of the determined PDD although there are some revisions (refer to MR, Section C).

The verifier positively determined these revisions and found them as improving the 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.

These revisions from original monitoring plan (refer to PDD, version 1.2 dated 01/02/11, Section D) are appropriately justified (refer to MR, Section C).

3.6 Data management (101)

The data and their sources, provided in the Monitoring Report Version 1.1 dated 05 July 2011 /1/, are clearly identified, reliable and transparent.

The implementation of data collection procedures is in accordance with the original monitoring plan of the determined PDD, including the quality control and quality assurance procedures. These procedures are mentioned in the section B.3 of monitoring report /1/.

The function of the monitoring equipment, including its calibration status, is in order. The internal quality system of OJSC “MMK” is functioning in accordance with the appropriate national standards and regulations in the metallurgical industry. Electricity and gas meters for commercial accounting and gauges are calibrated /13-21/ and by accredited organizations.

The evidence and records used for the monitoring are maintained in a traceable manner.



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

The data collection and management system for the project is in accordance with the monitoring plan. Executive director of OJSC MMK manages of the monitoring team through coordinating activities of the shop and departments, namely: Operating departments (BPCP, BFP, EAFP); Scientific and Technological Center (Central Lab); Center of Energy Saving Technologies; Technological department and etc. provides initial internal verification of accounting data and calculation of emissions based on yearly monitoring data base and in accordance with specialized corporate procedure SSGO-01-2010 /12/. Persons responsible for implementation of monitoring activities within the departments (refer to MR Section B.3) are appointed. Heads of departments are responsible for the quality, completeness and reliability of the information provided.

Outstanding issues related to Data management (101), PP’s response and the AIE conclusion are summarized in Appendix A Table 2 (refer to CAR 05).

The issued CAR 05 concerns evidence of calibration.

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the initial and 1st periodic verification of the “Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK” JI Project, 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 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 CTF Consulting 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 and Verification Plan indicated in the final PDD version 1.2 dated 01/02/2010. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 1.1 dated 05/07/2011 for the reporting period as indicated below. 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.

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 01/01/2008 to 31/12/2008

Baseline emissions	:	1,593,966	t CO ₂ equivalent.
Project emissions	:	1,124,628	t CO ₂ equivalent.
Emission Reductions (2008)	:	469,338	t CO ₂ equivalent.

Reporting period: From 01/01/2009 to 31/12/2009

Baseline emissions	:	421,687	t CO ₂ equivalent.
Project emissions	:	358,997	t CO ₂ equivalent.
Emission Reductions (2009)	:	62,690	t CO ₂ equivalent.

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

Baseline emissions	:	885,213	t CO ₂ equivalent.
Project emissions	:	681,398	t CO ₂ equivalent.
Emission Reductions (2010)	:	203, 815	t CO ₂ equivalent.

5 REFERENCES

Category 1 Documents:

Documents provided by CTF Consulting that relates directly to the GHG components of the project.

- /1/ Monitoring Report (Versions 1.1 dated 05/07/2011) "Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK". Monitoring period 01/01/2008 – 31/12/2010.



VERIFICATION REPORT

"Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK"

Excel spreadsheet with calculation of emission reduction. Provided by MR Developer.

- /2/ PDD_MMK_Slab steel_ENG_ver_1 2_01 02 11 (3)
- /3/ Determination Report RUSSIA/0105/2010 v.01 dated 31/01/2011

Category 2 Documents:

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

- /4/ JISC Guidance on criteria for baseline setting and monitoring. Version 02.
- /5/ Approval by Party B dated 01/06/2011
- /6/ Technical report (paper form) of blast furnace shop for 1988
- /7/ Technical reports (paper form) of blast furnace shop for 2004-2010
- /8/ Technical reports(electronic form) for 2009 and 2010
- /9/ Plan of training for Metrological service, 19.04.2010
- /10/ Planed cost breakdown for steelmaking pig iron in August 2004
- /11/ Planed cost breakdown for steelmaking pig iron in December 2004
- /12/ PD MMK 3-CCGO-01-2010, State of Monitor ERUs for 2010
- /13/ Schedule of calibration measurement equipment for 2010
- /14/ Schedule of checking up measurement equipment for 2010
- /15/ Passports of scales ##251-253, 018, 020 of December 9, 2004
- /16/ Passport of scale #320 of June 14, 2007
- /17/ Passport of bunker scale #4-VK3 of February 22, 2005
- /18/ List of scales of BF shop as of January 15, 2010
- /19/ List of counter which is used for calculation of electric energy consumption, 01.05.2010
- /20/ List of Measurement instrumentation of BF shop as of January 19, 2010
- /21/ Power rates for 2004
- /22/ Act for equipment implementation #16-07, 2007

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/ I. Sviridov – OJSC MMK, Acting Head of Energy Department of shop
- /2/ O. Maevskii – OJSC MMK, Key Specialist of Automation Department
- /3/ P. Dovjenco – OJSC MMK, Lead Engineer of UPT
- /4/ N. Konsov – OJSC MMK-Informservice, Key Specialist
- /5/ V. Juravlev – OJSC MMK, Key Specialist of blast-furnace



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

- production
- /6/ A. Mitchin – OJSC MMK, Project Manager
 - /7/ M. Gainutdinova – OJSC MMK, Lead Economist
 - /8/ O. Zudilin – OJSC MMK, Head of Agglofactory
 - /9/ A. Rubakov – OJSC MMK, Deputy Head of Agglofactory
 - /10/ O. Barbul – OJSC MMK, Deputy Head of Agglofactory
 - /11/ V. Kozioulin – OJSC MMK, Deputy Head of Environmental Protection Department
 - /12/ E. Ptisin – OJSC MMK, Lead Engineer of Environmental Protection Laboratory
 - /13/ K. Myachin – CTF Consulting, Carbon Project Manager



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

Appendix A: company PROJECT VERIFICATION Protocol

Table 1

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?	<p>CAR 01. The project has no approval by at least one of other than the host Party.</p> <p>CAR 02. Please include the information to the MR about the status of the JI project and its approval by the Parties involved.</p> <p>The revised MR has information that the project has approval by Party B which was received on 1st June 2011. Copy of the approval was sent by e-mail to AIE.</p>	CAR 01 CAR 02	OK OK
91	Are all the written project approvals by Parties involved unconditional?	Written project approvals by Parties involved 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?	<p>Implementation schedule of the project equipment consisted of the following stages:</p> <ul style="list-style-type: none"> – Demounting three classic open hearth furnaces and commissioning LFA #1, two section CCMs #1, 2 in 2004; – Demounting one DBSU, chemicals preparation plant, blooming mill plant (BMP) in 2005; – Commissioning two electric arc furnaces (EAF) #1, 2, LFA #2 (reconstruction of SRA #1), one slab CCM #5 in 2006; – Commissioning: LFA #3 in 2008; <p>CAR 03. Please include the project implementation schedule to MR and provide appropriate evidence of the commissioning of project equipment.</p>	CAR 03	OK



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<p>The achieved emission reduction for the 1st monitoring period 01/01/08 – 31/12/10 is 735,843 t CO₂ which is higher than the determined one in the PDD (654,697 t CO₂).</p> <p>This deviation is appropriately explained in MR, Section A.3: “using actual data for 2008 and 2009 the more accurate calculation of specific consumption of pig iron per ton of steel billet produced in EAFP (which has been made per month in the present monitoring report), has given a more precise value of ERUs for these years”.</p>		
93	What is the status of operation of the project during the monitoring period?	The emission reductions have been generated and monitored from 01/01/2008.	OK	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?	<p>The Monitoring System is operational in Magnitogorsk Iron and Steel Works OJSC. Monitoring of GHG emission reductions was carried out as per the Monitoring Plan of the determined PDD although there are some deviations.</p> <p>The deviations from monitoring plan are specified in section C of MR namely:</p> <ul style="list-style-type: none"> – changing of recording frequency of carbon content in metallurgical coke ; – purchase a part of required metallurgical coke from other coke producers. – technical quality passport for July 2008 is unreadable because of bad quality of printing. The value of carbon content in NG for this month was taken as 0.49 kg C/m³; – in April-July and November-December 2009 the steel was not melted in EAF-180 furnaces and for these months the formula D.1.1.2.-14 was changed; – in November-December 2008 and January 2009 the 	OK	OK



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<p>import of grid electricity was the value less than consumption of grid electricity by EAF-180 via 220/35 kV step-down substation registered by the meters and for correctness of the calculations the value of the import of grid electricity for these months has been equated in the calculation tables to the value of consumption of grid electricity by EAF-180 via 220/35 kV step-down substation;</p> <ul style="list-style-type: none"> – technological losses during transportation and distribution of grid electricity has been defined for all the year 2010 by data of 9 months as 7.24%; – the data of specific consumption of carbon-bearing raw materials, fuel and energy for production one ton steel by arc-furnace technique at JSC “Amurmetal”, “Metallurgical Plant “Kamasteel”, LLC, “Novorossmetal”, LLC and JSC “United Metallurgical Company” are taken from PDD “Production modernisation at OJSC Amurmetal, Komsomolsk-on-Amur, Khabarovsk Krai, Russian Federation”; – for “Ashinskiy metallurgical works” in 2008-2009 the value of specific CO₂ emissions from production of one ton of steel by scrap technique is equal to the value of specific CO₂ emissions from production of one ton of steel by scrap technique at JSC “Taganrog Steel Works”. <p>Section C of MR includes appropriate justification for these deviations.</p> <p>The verifier positively determined these revisions and found them as improving the 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.</p>		



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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?	AIE confirms that for calculating the emission reductions, key factors, those listed in 23 (b) (i)-(vi) DVM, influencing the baseline emissions and the activity level of the project as well as risks associated with the project were taken into account (refer to PDD Section B.2).	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 used for calculating emission reductions are not clearly identified, reliable and transparent. CAR 04. Please provide evidence of initial data used for calculation project GHG emissions. Calculation of emission reduction was carried out on the excel spreadsheets ERUs_calculation_MMK-3_Slab_2008_ver.1.0_07.04.11”, “ERUs_calculation_MMK-3_Slab_2009_ver.1.0_07.04.11” and “ERUs_calculation_MMK-3_Slab_2010 ver. 1.0_07.04.11” which were made available to AIE. The results of calculation of emission reduction are presented in MR Section D.	CAR 04	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 accuracy and reasonableness, and appropriately justified of the choice?	The verifier confirms that the emission factors which are used for calculating the emission reductions are selected by carefully balancing accuracy and reasonableness, and the choice is appropriately justified by MR developer, such as emission factor for iron production used from IPCC Guidelines 2006, Chapter 4, table 4.1.	OK	OK



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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?	Conservative assumptions are not explicitly addressed in the PDD. The calculation of emission reductions are based, in a transparent manner on plant specific data. Pending response to CAR 04.	Pending	OK
Applicable to JI SSC projects only_Paragraph 96_not applicable				
Applicable to bundled JI SSC projects only_Paragraphs 97-98_No 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?	MR developer provides an appropriate justification for the proposed revisions (refer to paragraph 94).	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?	The verifier positively determined these revisions and found them as improving the 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 (refer to paragraph 94).	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 procedures?	An information/process flow diagram, describing the entire process from raw data to reported totals is developed at the stage of PDD determination and is fulfilled without changes.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	Magnitogorsk Iron and Steel Works OJSC has relevant plans, procedures and schedules for calibration of monitoring equipment. Measuring devices have records of calibration and are periodically exposed to due maintenance procedures. CAR 05. Please provide to AIE evidence of calibration of the monitoring equipment and include an appropriate	CAR 05	OK



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		information to MR.		
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	Pending response to CAR 04.	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 for the project is developed at the stage of PDD determination and is maintained in accordance with the monitoring plan.	OK	OK
Verification regarding programs of activities (additional elements for assessment) _Paragraphs 102-105_ Not applicable				
Applicable to sample-based approach only _Paragraphs 106-110_ Not applicable				



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR 01. The project has no approval by at least one of other than the host Party.	90	<u>Response 1</u> See below.	<u>Conclusion on Response 1</u> CAR 01 is closed. The project has approval by Party B which was received on 1st June 2011.
CAR 02. Please include the information to the MR about the status of the JI project and its approval by the Parties involved.	90	<u>Response 1</u> The project has no approval yet in the Russian Federation as a Host Party. This is in process of receipt awaiting the announcement for submission of the project application to the Operator of carbon units (Sberbank) in accordance with procedure stipulated in the Decree #843 of 28, October 2009. The Declaration of Approval from State of the Netherlands, acting through the Ministry of Economic Affairs, Agriculture and Innovation and its implementing agency “NL Agency”, being the Designated Focal Point for Joint Implementation (JI) in The Netherlands has been received for the project by 1 st June 2011. Appropriate information has been provided in the Monitoring report, version 1.1 of 5 July 2011 on page 3.	<u>Conclusion on Response 1</u> CAR 02 is closed based on due amendments made to the revised MR.



VERIFICATION REPORT

“Production of continuously casted slab steel billet by arc-furnace technique at OJSC MMK”

CAR 03. Please include the project implementation schedule to MR and provide appropriate evidence of the commissioning of project equipment.	92	<u>Response 1</u> The project implementation schedule was introduced in the Monitoring report, version 1.1 of 5 July 2011 on page 3.	<u>Conclusion on Response 1</u> CAR 03 is closed based on due amendments made to the revised MR.
CAR 04. Please provide evidence of initial data used for calculation project GHG emissions.	95 (b)	<u>Response 1</u> The appropriate evidences have been provided to AIE.	<u>Conclusion on Response 1</u> CAR 04 is closed. Evidences of initial data used for calculation GHG emissions reduction have been provided to AIE and positively verified.
CAR 05. Please provide to AIE evidence of calibration of the monitoring equipment and include an appropriate information to MR.	101 (b)	<u>Response 1</u> The appropriate evidences have been provided to AIE.	<u>Conclusion on Response 1</u> CAR 05 is closed. The appropriate evidences are provided.