

MONITORING REPORT FORM (CDM-MR) *
Version 01 - in effect as of: 28/09/2010

CONTENTS

- A. General description of the project activity
 - A.1. Brief description of the project activity
 - A.2. Project participants
 - A.3. Location of the project activity
 - A.4. Technical description of the project
 - A.5. Title, reference and version of the baseline and monitoring methodology applied to the project activity
 - A.6. Registration date of the project activity
 - A.7. Crediting period of the project activity and related information
 - A.8. Name of responsible person(s)/entity(ies)

- B. Implementation of the project activity
 - B.1. Implementation status of the project activity
 - B.2. Revision of the monitoring plan
 - B.3. Request for deviation applied to this monitoring period
 - B.4. Notification or request of approval of changes

- C. Description of the monitoring system

- D. Data and parameters
 - D.1. Data and parameters determined at registration
 - D.2. Data and parameters monitored
 - D.3. Other relevant data and parameters

- E. Emission reductions calculation
 - E.1. Baseline emissions calculation
 - E.2. Project emissions calculation
 - E.3. Leakage calculation
 - E.4. Emission reductions calculation
 - E.5. Comparison of actual emission reductions with estimates in the registered CDM-PDD
 - E.6. Remarks on difference from estimated value

- F. Sustainable Indicators

MONITORING REPORT
VERSION 3.0 28/05/2012
Hebei Yingxin Glass Group Co. Ltd Glass Furnace Flue Gas Waste Heat to Energy Project
GS 750
01/01/2010 – 31/12/2011

SECTION A. General description of the project activity

A.1. Brief description of the project activity:

1. Purpose of the project activity and the measures taken to reduce greenhouse gas emissions;
 The purpose of the project is to utilize waste heat of the glass furnaces to produce electricity for self-use of Hebei Yingxin Glass Group Co. Ltd. (Project Owner). The electricity generated will meet part of the electricity demand of the company thereby displacing electricity generation from grid connected fossil fuel-fired power plants. In the absence of the project, the waste heat would be vented into the atmosphere. Thus the project can reduce greenhouse gas emissions.
2. Brief description of the installed technology and equipments;
 The installed capacity of the Project is 12 MW, including four boilers, two 6 MW turbines and two 6 MW generators.
3. Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods, etc.).
 Construction completed date: August 12th 2009
 Equipment commissioning start date: August 12th 2009

This monitoring period starts from Jan 1st, 2010.

Equipment	Technical Information
Generator 1	Type: QF-J6-2 Capacity: 6 MW Rated speed: 3000 r/min Manufacturer: Hangzhou Electrical Equipment Works Serial number: 2008-111-2
Generator 2	Type: QF-J6-2 Capacity: 6 MW Rated speed: 3000 r/min Manufacturer: Hangzhou Electrical Equipment Works Serial number: 2008-111-1
Turbine 1	Type: N6-2.35 Capacity: 6 MW Rated speed: 3000 r/min Manufacturer: Hangzhou Chinen Steam Turbine Power Co.Ltd Serial number: HS4513
Turbine 1	Type: N6-2.35 Capacity: 6 MW Rated speed: 3000 r/min Manufacturer: Hangzhou Chinen Steam Turbine Power Co.Ltd Serial number: HS4503
Waste Gas Recovery Boiler 1	Type: QCF 110/500-15-2.5/420 Capacity: 16 t/h Manufacturer: Hangzhou Boiler Company Serial number: 6988001

Waste Gas Recovery Boiler 2	Type: QCF 110/500-18-2.5/420 Capacity: 17 t/h Manufacturer: Hangzhou Boiler Company Serial number: 66987001
Waste Gas Recovery Boiler 3	Type: QCF 110/500-18-2.5/420 Capacity: 16 t/h Manufacturer: Hangzhou Boiler Company Serial number: 66987002
Waste Gas Recovery Boiler 4	Type: QCF 110/500-15-2.5/420 Capacity: 11 t/h Manufacturer: Hangzhou Boiler Company Serial number: 66986002

4. Total emission reductions achieved in this monitoring period.

Periods	Emission reduction (tCO _{2e})
01/01/2010 – 31/12/2010	65,398
01/01/2011 – 31/12/2011	41,185
Total	106,583

A.2. Project Participants

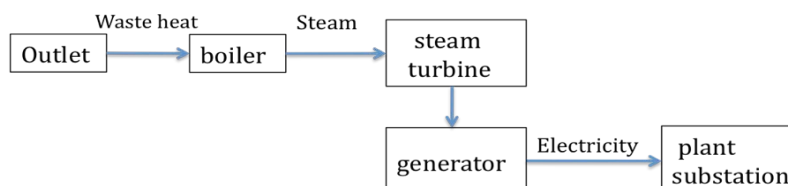
Name of Party involved (*) (Host) indicates a host Party)	Private and/or public entity (ies) Project participants (*) (As applicable)	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
People's Republic of China (Host)	Hebei Yingxin Glass Group Co. Ltd. (Project Owner)	No
Switzerland	Swiss Carbon Asset Ltd (Purchaser of GS VERs)	No

A.3. Location of the project activity:

The project is located in Donghuan Road, Shahe City (county-level city), Xintai City, Hebei Province, P.R.China. The plant is near by national road G107. The exact location of the plant is 36°51'18"N 114°30'11"E.

A.4. Technical description of the project

The waste heat is generated by four existing glass production lines. The waste heat is fed through waste heat pipes to four waste heat recovery boilers, which allow the feed water to recover the heat energy of low-temperature waste heat and convert it into superheated steam. Then steam will be fed into the steam turbine through the steam pipe. The heat energy will be converted into kinetic energy in the steam turbine to enable the turbine rotor to rotate at high speed, and then will be converted into mechanical energy to drive the generator to rotate, and electricity will then be generated. The main process of the Project Activity is as below:



A.5. Title, reference and version of the baseline and monitoring methodology applied to the project activity:

ACM 0012 V 03.2 - “Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects”.

The ACM0012 methodology refers to the Version 02 of the “Tool to calculate the emission factor for an electricity system”

A.6. Registration date of the project activity:

This monitoring report has been developed for the purpose of the Gold Standard verification. The project was registered at the Gold Standard registry on Nov 21, 2010.

A.7. Crediting period of the project activity and related information (start date and choice of crediting period):

The start date of the crediting period is Jan 1st, 2010¹. A fixed crediting period of 10 years has been chosen for this project activity.

A.8. Name of responsible person(s)/entity(ies):

Mr. Yang Xuan	Southpole Carbon	Project Manager	x.yang@southpolecarbon.com
Mrs. Huang Da Fei	Southpole Carbon	Supervisor	f.huang@southpolecarbon.com
Mr. Christoph Sutter	Southpole Carbon	Technical Reviewer	c.sutter@southpolecarbon.com

Address: Unit 2506 A, China Central Building T3, Jianguo Road 77, Chaoyang District, 100025, Beijing
Telephone: +86 10 84549953
Email: x.yang@southpolecarbon.com

SECTION B. Implementation of the project activity

B.1. Implementation status of the project activity

Starting date of operation of the project activity:
Sep 5th 2009: equipment commissioning started
Feb 15th 2010: continued operation started

This project consists of one site only and the implementation is not phased.

There were no special events during the monitoring period. No equipment was exchanged or overhauled.

No events occurred that affected the applicability of the methodology.

B.2. Revision of the monitoring plan

N/A

B.3. Request for deviation applied to this monitoring period

N/A

¹ Page 49, PDD: the starting date of the fixed crediting period is 01/01/2010.

B.4. Notification or request of approval of changes

N/A

SECTION C. Description of the monitoring system

Data collection procedures

1. Data generation: Electricity data is measured by calibrated power meters, which are operated and maintained by the project owner.
2. Data recording and transfer: First, the data measured is manually recorded by onsite staffs in the daily operation report. Second, the onsite manager approves daily operation report and transfers the data to monthly report. Third, at the end of each month, GS VER supervisor will check the monthly report and send it to South Pole.
3. Data aggregation: The calculated net power output is aggregated monthly.
4. Calculation: See section D.2 and section E. Total electricity generation ($Q_{OE,y}$), Electricity exported to the glass plant by the Project ($EG_{\text{export},y}$) and Electricity imported to the proposed project from the Grid ($EG_{\text{imported},y}$) per month are the difference between the cumulative values on the power meters. Net electricity output by the project activity (EG_y) is Electricity exported ($EG_{\text{export},y}$) minus Electricity Imported ($EG_{\text{imported},y}$). See section E for calculations of emission reductions.
5. Reporting: The calculated values are included in an Excel sheet and reported in the MR.

Organizational structure, roles and responsibilities

A GS VER supervisor has been appointed and trained who is responsible for the GS VER monitoring system. Monthly recording of power meters falls under the responsibility of the site.

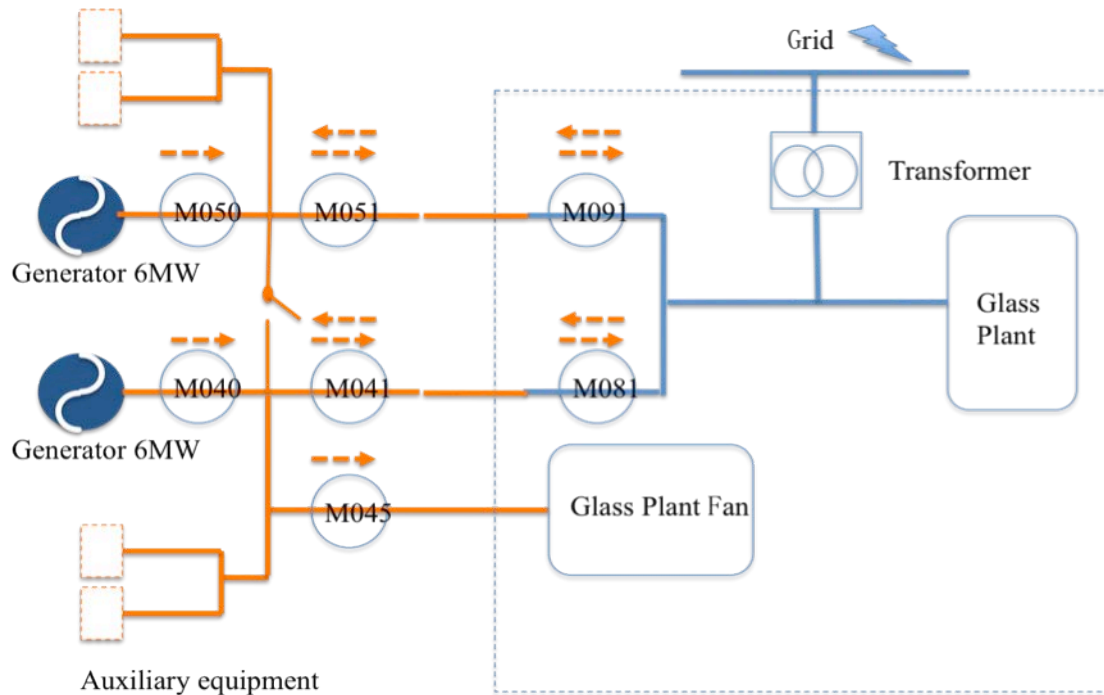
Three level training are provided, which are company safety training, workshop safety training and team safety training. The target group of company safety training is all the employees of Antai Group, especially the new employees. They will receive intensive training on safety before practical operation. When new employees get familiar with general company safety rules, they will be allocated to different workshops. The detailed technical training will be provided during workshop training. From which employees will understand production management and equipment operation. Then employees will be allocated to different teams under workshops. Responsibilities to each individual according to his/her position will be clarified.

Emergency procedures for the monitoring system

The GS VER supervisor will notify the manufacturer and the equipment maintenance team in case there is doubt about the correct functioning of the meters mentioned in the monitoring plan. In that case, manufacturer or the maintenance team will check, repair and where necessary replace the meters. No GS VERs are claimed for the period during which the meters were not functioning correctly. During this monitoring period, the meters have been working properly.

Line Diagram

Please find monitoring line diagram below. The numbers in the line diagram are meter tag numbers.



M050, M040 are used for total electricity generation ($Q_{OE,y}$).

M045, bidirectional meters M091 and M081 are used for net electricity output by the project activity (EG_y).

M051 and M041, which are installed at generation side, are used to crosscheck M091 and M081².

All meters are calibrated annually by Shahe Power Supply Company as per Verification Regulation of Electrical Energy Meters with Electronics (JJG 596-1999), Please find Calibration and Accuracy of Meters Sheet below:

² A small amount of electricity is exported to the glass plant fan directly due to short distance and only one meter (M045) is installed.

Calibration and Accuracy of Meters Sheet

Meter Measuring	Tag No.	Meter Serial No.	Meter type and model	Manufacturer name	Specific location	Measurement Range	Accuracy (%)	Calibration date (dd/mm/yy)	Valid until (dd/mm/yy)	Certificate No.
Q _{OE,y}	050	500006	DSSD3 31	Changsha Weishen Electric Company	Generator	0-999999	0.2	11/10/09	10/10/14	20091011006
								13/10/10	12/10/15	20101013006
								16/10/11	15/10/16	20111016006
Q _{OE,y}	040	500004	DSSD3 31	Changsha Weishen Electric Company	Generator	0-999999	0.2	11/10/09	10/10/14	20091011005
								13/10/10	12/10/15	20101013005
								16/10/11	15/10/16	20111013005
<i>EG</i> _{export,y} <i>EG</i> _{import,y}	051	500001	DSSD3 31	Changsha Weishen Electric Company	Control room	0-999999	0.2	11/10/09	10/10/14	20091011004
								13/10/10	12/10/15	20101013004
								16/10/11	15/10/16	20111016004
<i>EG</i> _{export,y} <i>EG</i> _{import,y}	041	500005	DSSD3 31	Changsha Weishen Electric Company	Control room	0-999999	0.2	11/10/09	10/10/14	20091011003
								13/10/10	12/10/15	20101013003
								16/10/11	15/10/16	20111016003
<i>EG</i> _{export,y}	045	055007	PD194E —2S4	Jiangsu Siger Electric Company	Control room	0-999999	0.5	11/10/09	10/10/14	20091011009
		550476	DSSD3 31	Changsha Weishen Electric Company	Control room	0-999999	0.5	26/05/10	25/05/15	20101013010
								16/09/10	15/09/15	20101013011
								13/09/11	12/09/16	20111016011
<i>EG</i> _{export,y} <i>EG</i> _{import,y}	081	006513	DSSD9 04	Beijing Kebo Electric Company	Glass furnace room	0-999999	0.5	11/10/09	10/10/14	20091011002
								13/10/10	12/10/15	20101013002
								16/10/11	15/10/16	20111016002
<i>EG</i> _{export,y} <i>EG</i> _{import,y}	091	006519	DSSD9 04	Beijing Kebo Electric Company	Glass furnace room	0-999999	0.5	11/10/09	10/10/14	20091011001
								13/10/10	12/10/15	20101013001
								16/10/11	15/10/16	20111016001

SECTION D. Data and parameters

D.1. Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

Data / Parameter:	$EF_{grid,CM,y}$
Data unit:	tCO ₂ /MWh
Description:	CO ₂ emission factor for the electricity source i (i=gr (grid) or i=is (identified source)), displaced due to the project activity, during the year y in tons CO ₂ /MWh
Source of data used:	Calculated according to the procedure outlined in B.6.1 of the registered PDD
Value(s) :	0.8935
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission Calculated on an ex-ante basis. The emission factor will not be updated during the crediting period.
Additional comment:	For this and other descriptions relating to this parameter, see the description in Section B.6.2 of the registered PDD, Data and parameters that are available at validation.

Data / Parameter:	$Q_{OE,BL}$
Data unit:	MWh
Description:	Output energy (i.e. electricity) that can be theoretically produced (in MWh), to be determined on the basis of maximum recoverable energy from the WECM, which would have been released in the absence of project activity.
Source of data used:	Feasibility Study Report
Value applied:	86,400 MWh (the total electricity generation)
Justification of the choice of data or description of measurement methods and procedures actually applied:	Based on equipment specifications and FSR
Any comment:	This is to determine the f_{cap}

D.2. Data and parameters monitored

Data / Parameter:	EG_v						
Data unit:	MWh						
Description:	Net electricity output by the project activity						
Measured /Calculated /Default:	Calculated						
Source of data:	Power meters						
Value(s) of monitored parameter:	<table border="0"> <tr> <td>Period</td> <td>Amount</td> </tr> <tr> <td>01/01/2010 - 31/12/2010:</td> <td>73,193</td> </tr> <tr> <td>01/01/2011 – 31/12/2011:</td> <td>46,094</td> </tr> </table>	Period	Amount	01/01/2010 - 31/12/2010:	73,193	01/01/2011 – 31/12/2011:	46,094
Period	Amount						
01/01/2010 - 31/12/2010:	73,193						
01/01/2011 – 31/12/2011:	46,094						
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission						
Monitoring equipment (type, accuracy class, serial number, calibration)	Please refer to Calibration and Accuracy of Meters Sheet in section C.						

frequency, date of last calibration, validity)	
Measuring/ Reading/ Recording frequency:	Read and recorded on daily basis and aggregated monthly
Calculation method (if applicable):	$EG_y = EG_{export, y} - EG_{imported, y}$
QA/QC procedures applied:	The calculation result will be crosschecked with data measured at generation plant.

Data / Parameter:	$Q_{OE, y}$						
Data unit:	MWh						
Description:	Quantity of total electricity generation during the year y						
Measured /Calculated /Default:	Measured						
Source of data:	Measurement records						
Value(s) of monitored parameter:	<table border="1"> <thead> <tr> <th>Period</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>01/01/2010 - 31/12/2010:</td> <td>81,270</td> </tr> <tr> <td>01/01/2011 - 31/12/2011:</td> <td>51,155</td> </tr> </tbody> </table>	Period	Amount	01/01/2010 - 31/12/2010:	81,270	01/01/2011 - 31/12/2011:	51,155
Period	Amount						
01/01/2010 - 31/12/2010:	81,270						
01/01/2011 - 31/12/2011:	51,155						
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission						
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Please refer to Calibration and Accuracy of Meters Sheet in section C.						
Measuring/ Reading/ Recording frequency:	Read and recorded on daily basis and aggregated monthly						
Calculation method (if applicable):	N/A						
QA/QC procedures applied:	Direct measurement by project participant through standard power meters. The electricity amount will be monitored continuously and recorded monthly. The meters would be calibrated every year according to national Verification Regulation of Electrical Energy Meters with Electronics (JJG 596- 1999) ³ . The accuracy of meters is no worse than 1.0. All the data must be kept for at least two years after the end of the crediting period.						

Data / Parameter:	$EG_{export, y}$						
Data unit:	MWh						
Description:	Electricity exported by the project activity to the plant during year y in MWh which is used to calculate emission reduction						
Measured /Calculated /Default:	Measured						
Source of data:	Power meters						
Value(s) of monitored parameter:	<table border="1"> <thead> <tr> <th>Period</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>01/01/2010 - 31/12/2010:</td> <td>73,193</td> </tr> <tr> <td>01/01/2011 - 31/12/2011:</td> <td>46,673</td> </tr> </tbody> </table>	Period	Amount	01/01/2010 - 31/12/2010:	73,193	01/01/2011 - 31/12/2011:	46,673
Period	Amount						
01/01/2010 - 31/12/2010:	73,193						
01/01/2011 - 31/12/2011:	46,673						
Indicate what the data are used for (Baseline/ Project/ Leakage emission)	Baseline emission						

³ In the registered PDD, the standard of Technical Administrative Code of Electric Energy Metering (DL/T448-2000) was referred to. However as the local calibration company follows the Verification Regulation of Electrical Energy Meters with Electronics (JJG 596- 1999), which is also a national standard and widely used in the industry. Therefore it is acceptable.

calculations)	
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Please refer to Calibration and Accuracy of Meters Sheet in section C.
Measuring/ Reading/ Recording frequency:	Read and recorded on daily basis and aggregated monthly
Calculation method (if applicable):	
QA/QC procedures applied:	The meters would be calibrated every year according to national Verification Regulation of Electrical Energy Meters with Electronics (JJG 596- 1999). The accuracy of meters is no worse than 0.5. All the data must be kept for at least two years after the end of the crediting period.

Data / Parameter:	$EG_{imported, y}$						
Data unit:	MWh						
Description:	Electricity imported by the project activity from the grid during year y, which is used to calculate emission reduction						
Measured /Calculated /Default:	Measured						
Source of data:	Power meters						
Value(s) of monitored parameter:	<table border="1"> <thead> <tr> <th>Period</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>01/01/2010 - 31/12/2010:</td> <td>0</td> </tr> <tr> <td>01/01/2011 - 31/12/2011:</td> <td>579</td> </tr> </tbody> </table>	Period	Amount	01/01/2010 - 31/12/2010:	0	01/01/2011 - 31/12/2011:	579
Period	Amount						
01/01/2010 - 31/12/2010:	0						
01/01/2011 - 31/12/2011:	579						
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Project emission						
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Please refer to Calibration and Accuracy of Meters Sheet in section C.						
Measuring/ Reading/ Recording frequency:	Read and recorded on daily basis and aggregated monthly						
Calculation method (if applicable):	N/A						
QA/QC procedures applied:	The meters would be calibrated every year according to national Verification Regulation of Electrical Energy Meters with Electronics (JJG 596- 1999). The accuracy of meters is no worse than 0.5. All the data must be kept for at least two years after the end of the crediting period.						

D.3. Other relevant data and parameters

No	1
Indicator	Air Quality during construction period
Mitigation measure	The major ambient air pollutant during construction period is dust. A 2 m height dust fence will be built around the project construction site and water sprayed at the construction site on a regular basis. For the onsite workers, masks would be dispensed. Construction residues would be covered to reduce dust, guaranteeing the onsite workers' health.
<i>Repeat for each parameter</i>	

Chosen parameter		Dust development during construction
Current situation of parameter		n/a
Estimation of baseline situation of parameter		n/a
Future target for parameter		Potential dust development during construction shall be controlled within the plant area
Way of monitoring	How	Photo or documentation records shall provide evidence that the mitigation measures and PPE had been implemented.
	When	Once upon validation
	By who	Monitored by Yingxin and validated by DOE

No		2
Indicator		Air Quality during operating period
Mitigation measure		N/A as indicator scores positive
<i>Repeat for each parameter</i>		
Chosen parameter		Dust and SO ₂ concentration at exhaust pipe
Current situation of parameter		Before PA: Dust concentration=167 mg/m ³ ; SO ₂ = 645 mg/m ³ < 800 mg/m ⁴ (GB9078-1996)
Estimation of baseline situation of parameter		N/a
Future target for parameter		Lower dust concentration is expected
Way of monitoring	How	Measurement of dust and SO ₂ concentration at exhaust pipe during normal operating time.
	When	Annually
	By who	Performed by Yingxin and Verified by DOE

No		3
Indicator		Quality of employment
Mitigation measure		N/A as indicator scores positive
<i>Repeat for each parameter</i>		
Chosen parameter		Permanent job positions, fire protection measures, workplace air quality
Current situation of parameter		In absence of the Project, no more permanent job positions will be offered.
Estimation of baseline situation of parameter		N/a
Future target for parameter		24 (job positions created solely by the PA) The workplace air quality follows national standard (GBJ16-87 and GBZ1-2002); The fire protection equipments are in place; the employees receive fire protection training.
Way of monitoring	How	Employment numbers and their relation to the permanency of a job are reported in HR data Certification from government or third party regarding workplace air quality Fire protection equipments list and training records
	When	Annually
	By who	Monitored by Yingxin or third party and Verified by DOE

No		4
Indicator		Human and institutional capacity

⁴ Source: Environmental Monitoring Report issued by Shahe EPA Monitoring Station

Mitigation measure	N/A as indicator scores positive	
<i>Repeat for each parameter</i>		
Chosen parameter	Female employment (number and job related education).	
Current situation of parameter	0	
Estimation of baseline situation of parameter	N/a	
Future target for parameter	≥ 1	
Way of monitoring	How	Female employment and training records for female employees are reported in HR data
	When	Annually
	By who	Monitored by Yingxin

No	5	
Indicator	Quantitative employment and income generation	
Mitigation measure	N/A as indicator scores positive	
<i>Repeat for each parameter</i>		
Chosen parameter	Number of jobs and income satisfaction rate	
Current situation of parameter	0 (In the absence of the Project, no additional employment opportunities would be generated)	
Estimation of baseline situation of parameter		
Future target for parameter	Permanent job positions created solely by the PA: Number of jobs: 24 positions The employees are satisfied with the income.	
Way of monitoring	How	HR data of job number and income will be copied and stored for verification check. Interviews will be performed with employees regarding satisfaction on income level and interview records will be stored for verification check.
	When	Annually
	By who	Monitored by Yingxin

No	6	
Indicator	Noise	
Mitigation measure	Install noise reduction equipment and protection measures for personnel	
<i>Repeat for each parameter</i>		
Chosen parameter	Implementation of noise reduction equipment for generators and protection measures for personnel	
Current situation of parameter	N/a	
Future target for parameter	The noise reduction equipment and PPE are implemented. The noise level follows the national standards, i.e. GBJ 87-85 and GB12348-1990.	
Way of monitoring	How	Certificate from third party or authority Staff will check the installation and protection measures and maintain reporting log. The reporting log will be presented for the DOE's review and interviews with the plant employees will be performed as well.
	When	Annually
	By who	Project owner, qualified third party or local environmental protection authority

No	7	
----	---	--

Indicator	Water quality	
Mitigation measure		
<i>Repeat for each parameter</i>		
Chosen parameter	Wastewater treatment	
Current situation of parameter	N/a	
Future target for parameter	Circulating cooling water, boiler blow down water and municipal wastewater properly treated, as per national standards.	
Way of monitoring	How	Layout of wastewater treatment system will be provided for better understanding on how the wastewater is treated by the PO. Certificate from third party or government will be provided to prove that wastewater is treated in accordance with national standards.
	When	Annually
	By who	Project owner or third party

No	8	
Indicator	Air quality of whole glass plant area after the PA	
Mitigation measure	N/A	
<i>Repeat for each parameter</i>		
Chosen parameter	Dust and SO ₂ concentration in atmosphere	
Current situation of parameter (before PA)	Dust concentration < 0.15 mg/m ³ , SO ₂ < 0.30 mg/m ³	
Future target for parameter (after PA)	Dust concentration < 0.15 mg/m ³ , SO ₂ < 0.30 mg/m ³	
Way of monitoring	How	Measurement of dust and SO ₂ concentration in atmosphere by third party or government. Report or certificate will be reviewed by DOE during verification.
	When	Once upon the first verification
	By who	Local authority

No	9	
Indicator	Safe and healthy work environment for workers of the whole plant	
Mitigation measure	N/A	
<i>Repeat for each parameter</i>		
Chosen parameter	Plant safety regulation and training; work environment status	
Current situation of parameter (before PA)	N/A	
Future target for parameter (after PA)	The plant safety measures are in place; work environment is healthy	
Way of monitoring	How	Plant safety measures, regulation and training records; Employee interview records on work environment; Certificate for work environment from third party or authority
	When	Annually
	By who	PO and third party or authority

No	10	
Indicator	Furnace waste refractory brick disposal	
Mitigation measure	N/A	
<i>Repeat for each parameter</i>		
Chosen parameter	Furnace waste refractory brick disposal with proper hazardous waste management measures	
Current situation of parameter (before PA)	In case any disposal of waste refractory brick from the furnace, a licensed hazardous waste treatment company would be used for proper hazardous waste disposal and treatment.	
Future target for parameter	Status quo ante	

(after PA)		
Way of monitoring	How	Maintenance records of glass furnace. Order forms and transfer manifests with the licensed third party that is handling waste refractory brick would be kept for records.
	When	Annually
	By who	PO

SECTION E. Emission reductions calculation

E.1. Baseline emissions calculation

Summary tables for year 2010 and 2011 including the calculation of baseline emissions, applying actual values, formulae and descriptions are as below. Please refer to Annex 1 for monthly generation and emission reduction calculation sheet.

2010:

Calculation of baseline emissions	Symbol	Amount	Unit	Formula	Notes
Electricity exported by the project activity to the plant	$EG_{\text{export}, y}$	73193	MWh		1
Electricity imported by the project activity from the grid	$EG_{\text{imported}, y}$	0	MWh		2
Net electricity production by the project activity	EG_y	73193	MWh	$EG_y = EG_{\text{export}, y} - EG_{\text{imported}, y}$	
Emission factor	$EF_{\text{grid}, \text{CM}, y}$	0.8935	on/MWh		3
Total electricity generated by project activity	$Q_{\text{OE}, y}$	81270	MWh		4
Annual electricity output that can be theoretically produced in this monitoring period	$Q_{\text{OE}, \text{BL}}$	86400	MWh/y		5
fcap	fcap	1.00		$f_{\text{cap}} = Q_{\text{OE}, \text{BL}} / Q_{\text{OE}, y}$	6
Total baseline emissions	BE_y	65398	ton	$BE_y = EG_y * f_{\text{cap}} * EF_{\text{grid}, \text{CM}, y}$	

2011:

Calculation of baseline emissions	Symbol	Amount	Unit	Formula	Notes
Electricity exported by the project activity to the plant	$EG_{\text{export}, y}$	46673	MWh		1
Electricity imported by the project activity from the grid	$EG_{\text{imported}, y}$	579	MWh		2
Net electricity production by the project activity	EG_y	46094	MWh	$EG_y = EG_{\text{export}, y} - EG_{\text{imported}, y}$	
Emission factor	$EF_{\text{grid}, \text{CM}, y}$	0.8935	on/MWh		3
Total electricity generated by project activity	$Q_{\text{OE}, y}$	51155	MWh		4
Annual electricity output that can be theoretically produced in this monitoring period	$Q_{\text{OE}, \text{BL}}$	86400	MWh/y		5
fcap	fcap	1.00		$f_{\text{cap}} = Q_{\text{OE}, \text{BL}} / Q_{\text{OE}, y}$	6
Total baseline emissions	BE_y	41185	ton	$BE_y = EG_y * f_{\text{cap}} * EF_{\text{grid}, \text{CM}, y}$	

Notes

- 1 power meter readings
- 2 power meter readings
- 3 fixed for this crediting period
- 4 power meter readings
- 5 Feasibility study report and days of this monitoring period
- 6 as per methodology and PDD

Electricity output measured by meter M091 and M081 at recipient side is crosschecked with the output measured by meter M051 and M041. The crosscheck results are summarized in the following table and it shows the monitoring system is accurate and reliable, with minor difference due to line loss.

Year	Recipient side (MWh)	Generation side (MWh)	Difference (Recipient side- Generation side) (MWh)	Difference percentage
2010	70,586	70,739	-153	-0.22%
2011	43,976	44,079	-103	-0.24%
Total	114,562	114,818	-256	-0.22%

E.2. Project emissions calculation

There is no project emission for the project in 2010 and 2011.

Calculation of project emissions				
Total project emissions	PEy	0.00	ton	1
Notes				
1 as per methodology and PDD				

E.3. Leakage calculation

There is no leakage for the project in 2010 and 2011.

Calculation of leakage emissions					
Total leakage emissions	Ly	0	ton	N/a	1
Notes					
1 as per methodology and PDD					

E.4. Emission reductions calculation / table

A summary table including the calculation of emission reductions, applying actual values, formulae and descriptions is as below. Please refer to Annex 1 for monthly generation and emission reduction calculation sheet.

2010:

Calculation of emission reductions	Symbol	Amount	Unit	Formula
Total baseline emissions	BEy	65398	ton	$BEy = EGy * fcap * EF_{grid,CM,y}$
Total project emissions	PEy	0	ton	
Total leakage emissions	Ly	0	ton	
Total emission reductions	ERy	65398	ton	$ERy = BEy - PEy - Ly$

2011:

Calculation of emission reductions	Symbol	Amount	Unit	Formula	Notes
Total baseline emissions	BEy	41185	ton	$BEy = EGy * fcap * EF_{grid,CM,y}$	1
Total project emissions	PEy	0	ton		2
Total leakage emissions	Ly	0	ton		3
Total emission reductions	ERy	41185	ton	$ERy = BEy - PEy - Ly$	4

Notes

1 y=365 days

2 as per methodology and PDD

3 as per methodology and PDD

4 as per methodology and PDD

E.5. Comparison of actual emission reductions with estimates in the CDM-PDD

According to the registered PDD of this project, the annually expected emission reduction of the project from electricity generation is 67,906 tCO_{2e}. The comparison table is given as below.

Emission reductions (tCO _{2e})	Values applied in ex-ante calculation of the registered GS-PDD (From electricity only)	Actual values reached during the monitoring period (From electricity only)
01/01/2010-31/12/2010 (tCO _{2e})	67,906	65,398
01/01/2011-31/12/2011 (tCO _{2e})	67,906	41,185
Total emission reductions of this monitoring period (tCO_{2e})	135,812	106,583

*Only emission reductions from electricity are considered.

E.6. Remarks on difference from estimated value in the PDD

The actual emission reduction amount of the present monitoring period is 29,228 below the registered PDD's estimation amount (or 21.5% lower, as shown below). The reason is that glass production in 2011 decreased, which made less waste heat available for electricity generation.

Emission Reduction Comparison Calculation:

The difference between actual and estimated emission reductions = 135,812 - 106,583 = 29,229 tCO_{2e}
(The ER amount of the present monitoring period is less from the registered PDD amount)

The percentage = 29,229 / 135,812 = 21.5%

For each year, the result is summarized as below:

Period	Difference (Actual value minus ex-ante value)	Percentage	Note
01/01/2010-31/12/2010	-2,508	-3.69%	Actual operation is in line with design and stay stable operation.
01/01/2011-31/12/2011	-26,721	-39.35%	Actual operation under performs compared to the design, due to low waste heat supply.

SECTION F. Sustainable Indicators

1. Air Quality during construction period

Parameter	Target for parameter	Time period	Monitored value
Dust during construction	Dust during construction (dust shall not disturb neighbourhood)	Construction period	Mitigation measures of spraying water etc. were implemented and dust did not disturb the life of local villagers.

Source: Shahe Environmental Protection Monitoring Center

The dust did not disturb the neighbourhood during construction period. Please refer to Annex 2 for certificates.

2. Air Quality during operating period

Parameter	Target for parameter (mg/m ³)	Time period	Monitored value (mg/m ³)
Dust concentration in flue gas	167	2010-2011	lower than 167
SO ₂ concentration in flue gas	645	2010-2011	lower than 645

Source: Shahe Environmental Protection Monitoring Center

The emission concentration of dust and SO₂ during the monitoring period is below 167 mg/m³ and 645 mg/m³. Please refer to Annex 3 for certificates.

3. Quality of employment

Parameter	Target for parameter	Time period	Monitored value
Number of full time jobs	24	2010-2011	24
Workplace air quality	The workplace air quality follows national standard	2010-2011	No benzene, sulfur trioxide, hydrogen-fluoride or other harmful gases are generated by the project. The workshop has good ventilation. It meets GBZ 1-2002
Fire protection	The fire protection equipments are in place; the employees receive fire protection training.	2010-2011	The fire protection system was checked and approved by local fire protection bureau. The employees took fire protection training and exams

Source: HR records; Shahe Environmental Protection Monitoring Center ; Local fire protection bureau certificate and training records

The project has created 24 job positions. The work place follows the national standard and fire protection measures are in place. Please refer to Annex 4 for HR records, workplace air quality and fire protection certificates and training records.

4. Human and institutional capacity

Parameter	Target for parameter	Time period	Monitored value
Female employment	≥ 1	2010-2011	6

Source: HR records; training records

The project has created 6 female employment positions. Please refer to Annex 4 for HR records and training records.

5. Quantitative employment and income generation

Parameter	Target for parameter	Time period	Monitored value
Number of jobs and income satisfaction rate	Number of jobs: 24 positions; The employees are satisfied with the income.	2010-2011	24 job positions are created. The income level of the employees are satisfying

Source: HR income records; interview records

The project has created 24 job positions. The income level is satisfying. Please refer to Annex 4 for HR records.

6. Noise

Parameter	Target for parameter	Time period	Monitored value
Implementation of noise reduction equipment for generators and protection measures for personnel	N/A	2010-2011	Equipments are covered by noise reduction shield and personnel has separate operation room with protection measures

Source: interview and equipment check records; noise certificate

Noise reduction equipment for generators and protection measures for personnel have been implemented. Please refer to Annex 5 for noise certificates.

7. Water quality

Parameter	Target for parameter	Time period	Monitored value
Wastewater treatment	Circulating cooling water, boiler blow down water and municipal wastewater properly treated, as per national standards	2010-2011	The wastewater treatment meets national standard GB8978-1996

Source:Shahe Environmental Protection Monitoring Center

The wastewater is properly treated and meets national standards. Please refer to Annex 6 for water quality certificates.

8. Air quality of whole glass plant area after the PA

Parameter	Target for parameter (mg/m ³)	Time period	Monitored value
Dust concentration in atmosphere	0.15	2010-2011	lower than 0.15
SO ₂ concentration in atmosphere	0.3		lower than 0.3

Source:Shahe Environmental Protection Monitoring Center

The concentration of dust and SO₂ in the atmosphere during the monitoring period is below 0.15 mg/m³ and 0.3 mg/m³. Please refer to Annex 6 for air quality certificates.

9. Safe and healthy work environment for workers of the whole plant

Parameter	Target for parameter	Time period	Monitored value
Plant safety regulation and training and work environment status	The plant safety measures are in place; work environment is healthy	2010-2011	The plant complies with Occupational Health and Safety requirements (GB/T 28001-2001)

Source: Glass plant Occupational Health and Safety Certificate

The glass plant provides good working environment to the employees and obtained Occupational Health and Safety certificate. Please refer to Annex 6 for QHS certificate.

10. Furnace waste refractory brick disposal

Parameter	Target for parameter	Time period	Monitored value
Furnace waste refractory brick disposal with proper hazardous waste management measures	N/a	2010-2011	The waste refractory brick will be sold to third party and reused. No hazardous waste is produced

Source: waste refractory brick recycle contract

Please refer to Annex 7 for disposal contract.



Annex 1: The monthly sheet for generation and emission reduction

Year	Month	recording date	Electricity generation (Generator 3) MWh	Electricity generation (Generator 4) MWh	Total Electricity generation (QOE,y) MWh	Electricity export (EG _{export, y}) MWh	Electricity import (EG _{imported, y}) MWh	Net electricity production (EG _y =EG _{export, y} -EG _{imported, y}) MWh	Baseline emission (BE _y =EG _y *f _{cap} * EF grid,y) ton CO _{2e}	Emission reduction (ER _y =BE _y -PE _y) ton CO _{2e}
2010	Start date	1/1/10								
	January	1/25/10	2582.71	2583.07	5165.78	4736.01	0.00	4736.01	4231.62	4231.62
	February	2/25/10	3645.72	3637.94	7283.66	6676.39	0.00	6676.39	5965.35	5965.35
	March	3/25/10	3146.29	3239.24	6385.53	5827.84	0.00	5827.84	5207.17	5207.17
	April	4/25/10	3088.72	3140.99	6229.71	5652.93	0.00	5652.93	5050.90	5050.90
	May	5/25/10	3292.96	3244.64	6537.60	5870.78	0.00	5870.78	5245.54	5245.54
	June	6/25/10	3427.92	3308.01	6735.93	6051.02	0.00	6051.02	5406.59	5406.59
	July	7/25/10	3246.10	3263.45	6509.55	5793.92	0.00	5793.92	5176.87	5176.87
	August	8/25/10	3592.08	3625.74	7217.82	6436.54	0.00	6436.54	5751.05	5751.05
	September	9/25/10	3542.12	3550.84	7092.96	6360.00	0.00	6360.00	5682.66	5682.66
	October	10/25/10	3627.01	3623.88	7250.89	6522.58	0.00	6522.58	5827.93	5827.93
	November	11/25/10	3821.36	3886.38	7707.74	6887.62	0.00	6887.62	6154.09	6154.09
	December	12/25/10	3502.57	3651.21	7153.78	6377.98	0.00	6377.98	5698.73	5698.73
	Total		40515.56	40755.39	81270.95	73193.61	0.00	73193.61	65398.49	65398.49



Year	Month	recording date	Electricity generation (Generator 3)	Electricity generation (Generator 4)	Total Electricity generation (QOE,y)	Electricity export (EG _{export, y})	Electricity import (EG _{imported, y})	Net electricity production (EG _y =EG _{export, y} -EG _{imported, y})	Baseline emission (BE _y =EG _y *f _{cap} *EF grid,y)	Emission reduction (ER _y =BE _y -PE _y)
			MWh	MWh	MWh	MWh	MWh	MWh	MWh	ton CO _{2e}
2011	January	1/25/11	2945.53	3021.81	5967.34	5338.34	0.00	5338.34	4769.81	4769.81
	February	2/25/11	3233.65	2267.15	5500.80	5003.46	109.13	4894.33	4373.08	4373.08
	March	3/25/10	581.05	1860.36	2441.41	2357.40	127.26	2230.14	1992.63	1992.63
	April	4/25/11	1086.91	2834.71	3921.62	3503.86	0.00	3503.86	3130.70	3130.70
	May	5/25/11	2086.51	1506.54	3593.05	3327.50	137.71	3189.79	2850.08	2850.08
	June	6/25/11	2196.71	1411.32	3608.03	3450.80	204.95	3245.85	2900.17	2900.17
	July	7/25/11	1552.37	1894.50	3446.87	3067.94	0.00	3067.94	2741.20	2741.20
	August	8/25/11	1788.63	1958.88	3747.51	3348.96	0.00	3348.96	2992.30	2992.30
	September	9/25/11	2711.93	2844.15	5556.08	5079.32	0.00	5079.32	4538.37	4538.37
	October	10/25/11	2637.60	2667.02	5304.62	4854.50	0.00	4854.50	4337.50	4337.50
	November	11/25/11	2513.62	2425.65	4939.27	4486.42	0.00	4486.42	4008.62	4008.62
	December	31/12/11	1579.46	1549.16	3128.62	2855.40	0.00	2855.40	2551.30	2551.30
	Total		24913.97	26241.25	51155.22	46673.90	579.05	46094.85	41185.75	41185.75



Annex 3 Air Quality during operating period

Operation period - 2010

沙河市环境保护监测站 监测结果报告书

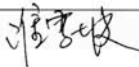
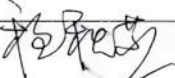

报告日期 2010 年 12 月 20 日

样品名称	废 气	采样地点	排气筒	采样方法	规 范
监测日期	见 表	采样人	李 峰	受检单位	河北迎新玻璃集团有限公司余热发电项目

检测分析结果:

监测日期	监测项目	监测结果	标准值
2010 年 02 月 12 日 (第一季度)	排气量 (Nm ³ /h)	51273	—
	SO ₂ (mg/m ³)	569	850
	烟尘 (mg/m ³)	88.7	200
2010 年 05 月 15 日 (第二季度)	排气量 (Nm ³ /h)	50164	—
	SO ₂ (mg/m ³)	582	850
	烟尘 (mg/m ³)	92.3	200
2010 年 8 月 14 日 (第三季度)	排气量 (Nm ³ /h)	49573	—
	SO ₂ (mg/m ³)	578	850
	烟尘 (mg/m ³)	96.5	200
2010 年 11 月 17 日 (第四季度)	排气量 (Nm ³ /h)	51234	—
	SO ₂ (mg/m ³)	587	850
	烟尘 (mg/m ³)	87.4	200
	烟尘 (mg/m ³)	87.4	200

本次监测期间，该企业废气排放中各污染因子均符合《工业炉窑大气污染物排放标准》(GB9078-1996)中表 2 和表 4 中二级标准限值要求，为达标排放。

检验者  审核  监测站  (盖章)



Operation period- 2011

沙河市环境保护监测站 监测结果报告书

报告日期 2011 年 12 月 25 日

样品名称	废 气	采样地点	排气筒	采样方法	规 范
监测日期	见 表	采 样 人	王志强	受检单位	河北迎新玻璃集团有限公司余热发电项目

检测分析结果:

监测日期	监测项目	监测结果	标准值
2011 年 02 月 06 日 (第一季度)	排气量 (Nm ³ /h)	50273	—
	SO ₂ (mg/m ³)	567	850
	烟尘 (mg/m ³)	89.7	200
2011 年 06 月 02 日 (第二季度)	排气量 (Nm ³ /h)	50124	—
	SO ₂ (mg/m ³)	572	850
	烟尘 (mg/m ³)	87.4	200
2011 年 08 月 24 日 (第三季度)	排气量 (Nm ³ /h)	51023	—
	SO ₂ (mg/m ³)	582	850
	烟尘 (mg/m ³)	90.7	200
2011 年 12 月 10 日 (第四季度)	排气量 (Nm ³ /h)	49536	—
	SO ₂ (mg/m ³)	576	600
	烟尘 (mg/m ³)	85.4	100

本次监测期间，该企业第一、二、三季度废气排放中各污染因子均符合《工业炉窑大气污染物排放标准》(GB9078-1996)中表 2 和表 4 中二级标准限值要求，第四季度符合《平板玻璃工业大气污染物排放标准》(GB26453-2011)表 1 中玻璃熔窑标准限值要求，为达标排放。

检验者

游宇波

审核

程和芝

监测站



(盖章)



Annex 4 Quality of employment, Human and institutional capacity, Quantitative employment and income generation

HR records - Name, Job Position, Income and Gender



余热电厂

序号	姓名	职位	月薪	性别
1	张平平	一值值班长	2000	女
2	李春芳	汽机值班员	1950	女
3	王宇	汽机值班员	1900	男
4	张姣	电气值班员	1950	女
5	陈志杰	电气值班员	1900	男
6	韩日奇	锅炉值班员	1950	男
7	徐鹏鹏	锅炉值班员	1900	男
1	赵秀军	二值值班长	2000	男
2	李晓静	汽机值班员	1950	女
3	周瑞安	汽机值班员	1900	男
4	李聚宾	电气值班员	1950	男
5	宋晓辉	电气值班员	1900	女
6	王晓国	锅炉值班员	1950	男
7	王博	锅炉值班员	1900	男
1	刘增超	三值值班长	2000	男
2	贺晓光	汽机值班员	1950	男
2	贺晓光	汽机值班员	1950	男
3	杨召坡	汽机值班员	1900	男
4	李英辉	电气值班员	1950	女
5	申条	电气值班员	1900	男
6	李伟峰	锅炉值班员	1950	男
7	赵亚伦	锅炉值班员	1900	男
1	李占青	机电维修工	2000	男
2	赵永涛	机电维修工	2000	男
3	张子彦	机电维修工	2000	男



Workplace air quality certificate- 2010

沙河市环境保护监测站 监测结果报告书

报告日期 2010年05月17日

样品名称 见表 采样地点 余热发电室内 采样方法 规范

监测日期 2010/05/15 采样人 韩倍雷 受检单位 河北迎新玻璃集团有限公司
2×6MW 余热发电项目室内环境空气监测

检测分析结果:

监测日期	监测项目	监测点位	单位	监测结果
2010年05月15日	苯	1#东	mg/m ³	未检出
		2#南	mg/m ³	未检出
		3#西	mg/m ³	未检出
		4#北	mg/m ³	未检出
	硫酸雾	1#东	mg/m ³	未检出
		2#南	mg/m ³	未检出
		3#西	mg/m ³	未检出
		4#北	mg/m ³	未检出
	氟化氢	1#东	μg/m ³	未检出
		2#南	μg/m ³	未检出
		3#西	μg/m ³	未检出
		4#北	μg/m ³	未检出

本次监测期间，该企业 2×6MW 余热发电项目施工过程中室内空气浓度均未检出，生产过程中不涉及有毒有害气体，发电车间通风正常，员工作业室配有暖气空调，工作环境舒适。

检验者

审核

监测站 (盖章)





Workplace air quality certificate- 2011

沙河市环境保护监测站 监测结果报告书

报告日期 2011 年 06 月 04 日

样品名称 见表 采样地点 余热发电室内 采样方法 规范
 监测日期 2011/06/02 采样人 刘伟 受检单位 河北迎新玻璃集团有限公司
 2×6MW 余热发电项目室内环境空气监测

检测分析结果：

监测日期	监测项目	监测点位	单位	监测结果
2011年06月02日	苯	1#东	mg/m ³	未检出
		2#南	mg/m ³	未检出
		3#西	mg/m ³	未检出
		4#北	mg/m ³	未检出
	硫酸雾	1#东	mg/m ³	未检出
		2#南	mg/m ³	未检出
		3#西	mg/m ³	未检出
		4#北	mg/m ³	未检出
	氟化氢	1#东	mg/m ³	未检出
		2#南	mg/m ³	未检出
		3#西	mg/m ³	未检出
		4#北	mg/m ³	未检出
		1#北	mg/m ³	未检出

本次监测期间，该企业 2×6MW 余热发电项目施工过程中室内空气浓度均未检出，生产过程中不涉及有毒有害气体，发电车间通风正常，员工作业室配有暖气空调，工作环境舒适。

检验者

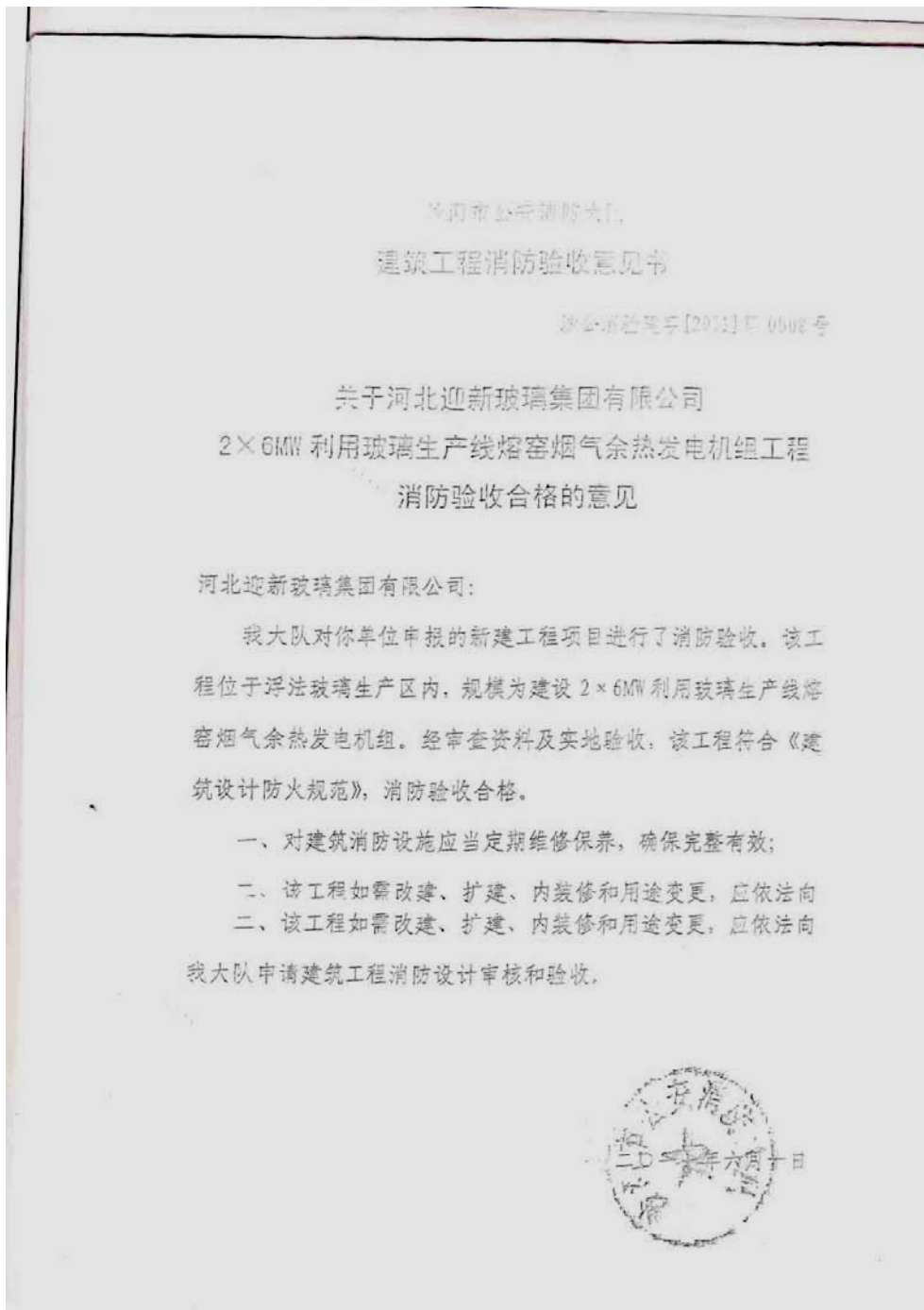
审核

监测站

(盖章)



Fire protection system approval by Shahe Fire Protection Bureau





Project employees' safety training records (female employees joined as well)

河北迎新玻璃集团有限公司

记录表格

培训记录

编号: JL-6.2-01

单位: 余热电厂二值

时间: 2010.06.18	培训题目:	培训教师: 赵彦军
地点: 主控室	安全重于泰山	培训方式: 讲授
参加培训人员名单(共 10 人):		
李聚宾 宋晓辉 高庆伟 王晓国 赵少昆 张霞 李晓静 王博 周瑞安 刘欣		
培训内容摘要:		
<p>1. 安全学习的重要性 安全知识反复讲,反复学,为什么有些地方和企业还老出问题?其根本原因在哪里?这就是我们反复学习,反复强调“安全”的原因,要常抓不懈。</p> <p>2. 讲实例。</p> <p>3. 怎样增强自身的安全意识和提高发现安全隐患的能力,做到“三不伤害”。</p> <p>4. 安全要常抓不懈,居安思危,安全责任重于泰山。</p>		
考核方式及成绩:		
李聚宾 84 宋晓辉 80 高庆伟 96 王晓国 90 赵少昆 81 张霞 90 李晓静 97 王博 80 周瑞安 84 刘欣 93		
考核合格率:		
编制:	审核:	批准: 日期:



Annex 5. Noise

Operation period-2010

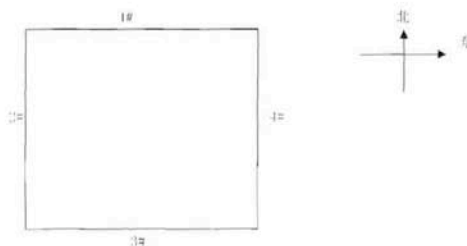


沙河市环境保护监测站 监测结果报告书

报告日期 2010 年 04 月 12 日

样品名称	噪 声	采样地点	厂 界	采样方法	规 范
采样日期	见 表	采 样 人	韩信雷	受检单位	河北迎新玻璃集团有限公司 2×600MW 余热发电项目

检测分析结果:



单位: dB(A)

监测日期	类别	1#北厂界	2#西厂界	3#南厂界	4#东厂界	标准
2010.4.10	昼间	54.8	56.3	55.2	54.1	60
	夜间	47.4	46.4	45.6	45.1	50
2010.4.11	昼间	57.6	56.9	57.1	55.3	60
	夜间	47.7	45.7	44.4	45.6	50

本次监测期间该企业噪声排放符合《工业企业厂界环境噪声排放标准》(GB12348—2008)中表一2级标准要求,为达标排放。

检验者 *韩信雷*

审核 *杨和燕*

监测站 (盖章)





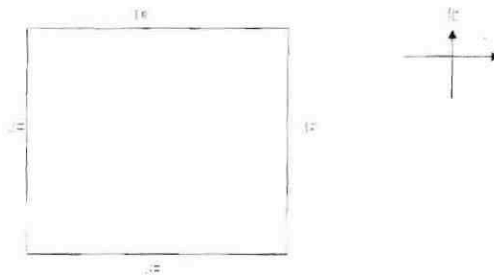
Operation period – 2011

沙河市环境保护监测站 监测结果报告书

报告日期 2011年 06 月 15 日

样品名称	噪声	采样地点	厂界	采样方法	规范
采样日期	见表	采样人	李峰	受检单位	河北迎新玻璃集团有限公司 2×600MW 余热发电项目

检测分析结果:



单位: dB(A)						
监测日期	类别	1#北厂界	2#西厂界	3#南厂界	4#东厂界	标准
2011.6.14	昼间	55.8	55.6	54.7	57.1	60
	夜间	46.8	45.6	44.3	47.2	50
2011.6.15	昼间	56.4	55.9	55.7	56.8	60
2011.6.15	昼间	50.4	55.9	55.7	56.8	60
2011.6.15	昼间	56.4	55.9	55.7	56.8	60
	夜间	46.1	44.1	44.6	46.3	50

本次监测期间该企业噪声排放符合《工业企业厂界环境噪声排放标准》(GB12348--2008)中表一2级标准要求,为达标排放。

检验者: 李峰

审核: 杨根堂





Annex 6 Water quality and Air quality of whole glass plant area after the PA
Operation period -2010

沙河市环境保护监测站 监测结果报告书

报告日期 2010年11月15日

样品名称 废水、废气 采样地点 总排污口、厂界 采样方法 规范
监测日期 见表 采样人 李峰 受检单位 河北迎新玻璃集团有限公司

检测分析结果:

总排污口废水监测结果

监测日期	监测项目	监测值		标准值
		第一次	第二次	
2010年11月13日	pH (无量纲)	7.15	7.13	6-9
	CODcr (mg/L)	67.3	68.1	150
	悬浮物 (mg/L)	55.4	52.5	150
	氨氮 (mg/L)	15.6	16.2	25

无组织排放废气监测结果

监测日期	监测项目	监测值				标准值
		东厂界	西厂界	南厂界	北厂界	
2010年11月13日	SO ₂ (mg/m ³)	0.146	0.138	0.124	0.150	0.5
2010年11月13日	颗粒物(mg/m ³)	0.151	0.148	0.138	0.137	1.0

本次监测期间,该企业经化粪池和沉淀池处理后的废水排放各项污染物均符合《污水综合排放标准》(GB8978-1996)二级标准限值要求,为达标排放。无组织颗粒物和SO₂排放均符合《大气污染物综合排放标准》(GB16297-1996)表2无组织排放监控浓度限值的要求,为达标排放。

检验者 杨雪波

审核 杨和志

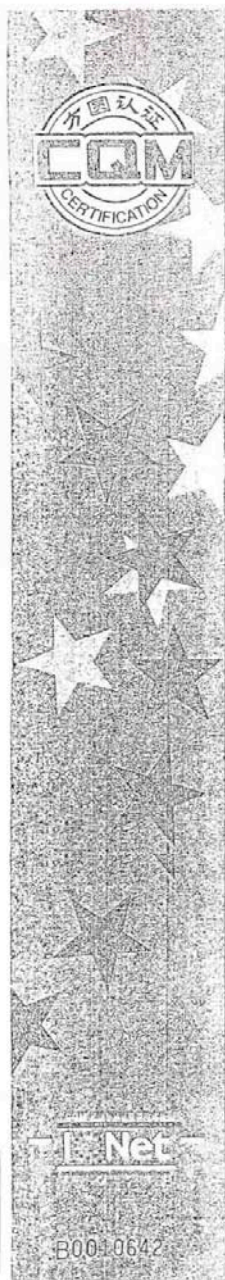
监测站 (盖章)





Annex 6 Safe and healthy work environment for workers of the whole plant

Occupational Health and Safety certificate
Valid May 27, 2009 until May 26, 2012



职业健康安全管理体系 认证证书

注册号: CQM-99-2008-0125-0003

兹证明

河北迎新玻璃集团有限公司

住所: 河北省邢台市沙河市迎新大街东段
认证地址: 河北省沙河市迎新大街东段 (054100)

管理体系符合

GB/T 28001-2001 标准要求

(本标准覆盖了 OHSAS 18001:1999 标准的所有技术内容)

覆盖的产品及其过程

浮法玻璃的生产 (一、二分厂)

覆盖的分场所认证范围见下表

名称	认证地址	产品/活动
河北迎新集团矽石热电有限公司	河北省沙河市东环路中段	热力的生产

证书号: CQM09S10301R0L 有效期至: 2012年5月26日

证书号: CQM09S10301R0L 有效期至: 2012年5月26日

(可通过转证《确认证书》, 查询方圆网站确认本证书的有效性)

总经理: 张伟



二零零九年五月二十七日

方圆标志认证集团

地址: 北京朝阳区北辰路33号(100048)

B0010642



Annex 7 Furnace waste refractory brick disposal

Waste refractory brick disposal contract

格法二线买卖合同

甲方：河北迎新玻璃集团有限公司

乙方：于友祥

经甲乙双方协商，乙方自愿购买甲方格法二线窑炉及设备，具体协议如下：

一、乙方购买的总价款为：肆佰捌拾万元整（480万，为不含税价），合同签订后预交押金10万元。

二、乙方所购设备等详见清单，清单作为合同一部分与合同具有同等法律效力

三、乙方拆卸日前交总价款的50%（240万元），设备等出厂前交清剩余的50%价款（240万元），乙方预付的10万元可顶替在总价款中。

四、乙方所购的窑炉、设备等拆卸、运输均由乙方自己负责，拆卸、运输过程中乙方发生的一切安全工伤事故由乙方自己负责，与甲方无关。

五、乙方拆运过程中须遵守甲方厂规厂纪。

六、乙方施工过程中所需的水、电及住宿由甲方提供。

七、乙方拆卸及运输期限为100天，乙方不负责清理垃圾及窑内玻璃疙瘩。在保证乙方大型设备进出的情况下乙方不得损坏甲方的厂房等基础设施。在保证乙方大型设备进出的情况下乙方不得损坏甲方的厂房等基础设施。在保证乙方大型设备进出的情况下乙方不得损坏甲方的厂房等基础设施。在保证乙方大型设备进出的情况下乙方不得损坏甲方的厂房等基础设施。否则由此给甲方所造成的损失由乙方负责赔偿。

八、本合同一式两份，甲乙双方各执一份。

九、本合同自签订之日起生效。

甲方：河北迎新玻璃集团有限公司

乙方：(代表签字)

(代表签字)

二零一一年五月三日