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

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* as contained within the document entitled "Guidelines for completing the monitoring report form (CDM-MR)" (EB 54 meeting report, annex 34).

MONITORING REPORT
Version 1.0 - 09/09/2011

Mianyang Landfill Gas Utilisation Project
CDM Registration Number: 1664
Monitoring Period 6 – 25/02/2011-24/08/2011 (inclusive)

SECTION A. General description of the project activity

A.1. Brief description of the project activity:

Mianyang Landfill Gas Utilisation Project (hereinafter is referred as "The Project") aims to extract, capture and utilize landfill gas (LFG) to generate electricity. The electricity generated is exported to the Central China Electrical Power Grid (the Grid).

Under the project activity, a fully integrated LFG collection system has been installed and operated. The project activity uses Sindicatum Carbon Capital (SCC) state of the art, proprietary LFG gas collection system that has been developed for Asian landfill sites. When the yield of gas is insufficient to supply to the generators, or surplus LFG is available, due to engine maintenance or other site factors, LFG is sent to an enclosed ground flare where it is flared; thus minimising methane emissions and maximising carbon abatement. The landfill gas currently powers four 500kWe generators and the excess gas is flared in an enclosed flaring system with a capacity of 1000 Nm^3/h.

The annual emission reductions of the project activity indicated in the PDD are approximately 93,500 tCO_2e yearly over the 10-year crediting period.

The construction of LFG extraction pipework system commenced in November 2007. Landfill gas has been extracted and combusted by flare since 28th of May 2008, which is the project's first day of operation. During the period from 1 June 08 to 15 November 2009 there was no power/electricity generated or exported to the grid, due to incompletion of electricity transmitting line and grid connection. The physical installation of the first two engines and construction of the grid connection was completed by the end January 2010. Following commissioning the Mianyang project started to export power to the grid in early March 2010 from the fist two engines. The final 3rd and 4th Engines were installed and commissioned in September 2010 which completes the proposed project installation.

Total emission reductions achieved in this monitoring period are **50,372** tCO_2e.

A.2. Project Participants

The project participants are:

Mianyang Taidu Environmental Energy Technical Development Company Ltd.，a Chinese enterprise which was established under the laws of the People's Republic of China and having its registered office at Mianyang, Sichuan Province, PRC.

Sindicatum Carbon Capital Ltd, a company incorporated under the laws of England and having its registered office at 33 Duke Street, London, W1U 1JY, United Kingdom (hereinafter referred to as "SCC").

A.3. Location of the project activity:

The Project is located within Mianyang Landfill, Loufang Village, Mianyang City, Sichuan Province, P.R.China. The geographic coordinates of the project are: latitude 104° 43′6″ East and longitude 31°24′50″ North.

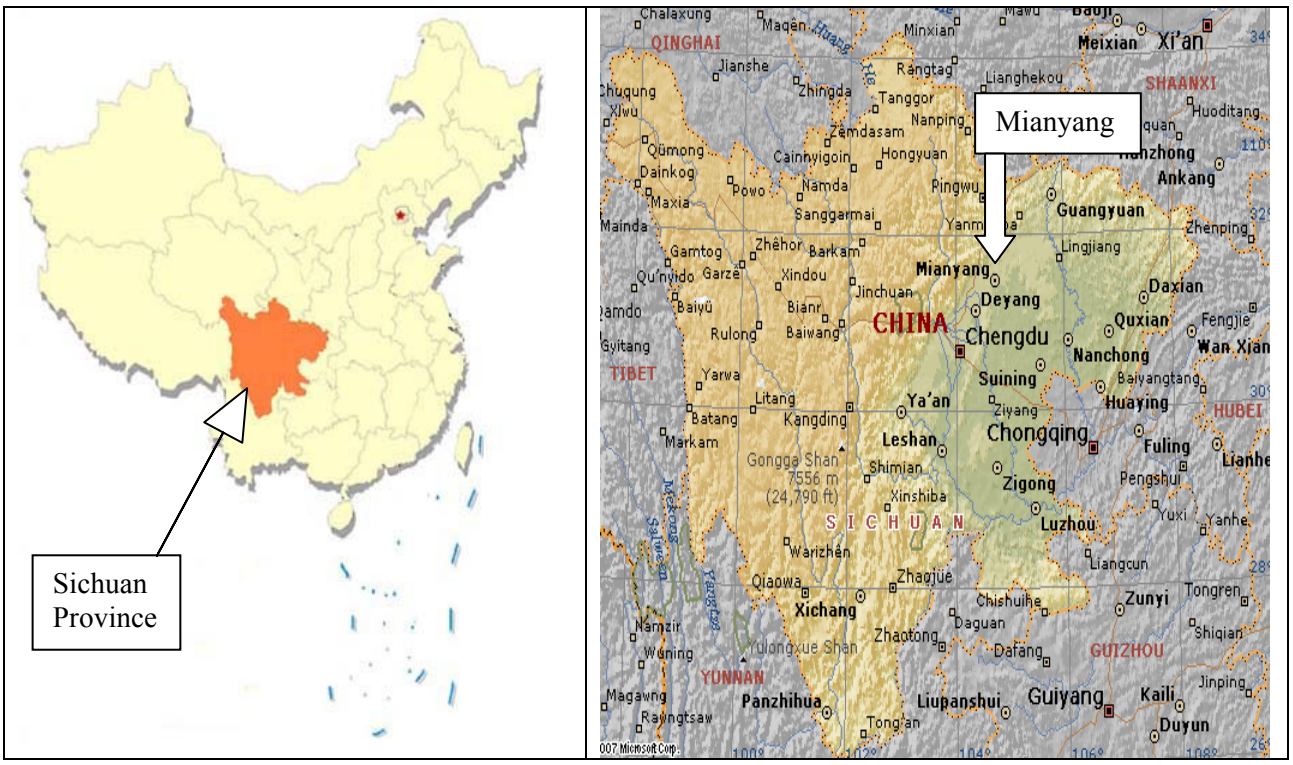


Figure 1 Location of the project activity.

A.4. Technical description of the project

The project extracts, captures and utilizes landfill gas (LFG) from Mianyang Landfill to generate electricity. Whenever there is surplus LFG, due to engine maintenance or other site factors, LFG is sent to an enclosed ground flare where it is flared thus minimising methane emissions and maximising carbon abatement.

The project activity uses proprietary, state of the art LFG gas collection systems combined with western tipping practices, rainfall and leachate management techniques to maximise landfill gas extraction efficiency.

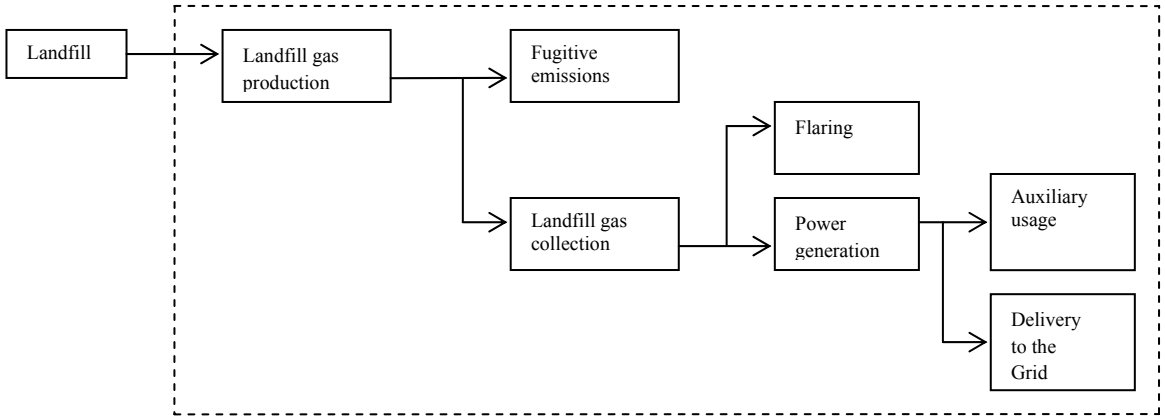


Figure A.4-1 Diagrammatic sketch of project boundary

Landfill gas collection system:
High density plastic (HDPE) horizontal and vertical pipes are laid into the existing waste. The pipes are surrounded in gravel and connected to a pump, which is used to create differential pressures within the landfill. The landfill gas, comprising approximately 50% methane, is extracted from the landfill and piped to a combination of generator(s) and flare. The LFG collection system is designed to maximise gas collection compared to the traditional practice of only vertical vents.

Landfill gas utilization (power generation)
After the LFG has passed through the pre treatment plant the gas is sent to spark ignition power generation units. The electricity generated is exported to the Central China Power Grid. The project activity consists of 4 sets of Internal Combustion Engine & Generator system manufactured by Jinan Diesel Engine Co. Ltd. The total installed capacity is 2 MW. The specification for the generator sets are shown below:

Parameters	**Engines**
Model	G12V190ZLDT-2*
Quantity	4
Style	4 strokes
Rated rotating speed	1000r/minute
parameters	**Generators**
Model	1FC6456-6LA42**
Quantity	4
Style	automatic, brushless

Rated power	500kW
Rated voltage	400V
Rated frequency	50Hz
Power factor	0.8(lagging)
Rated rotating speed	1000r/minute

**this is the actual engine model on name plate , which is different from that in PDD (G12V190ZLDT-Z), as the difference is due to a typo mistake.*
***this is the actual generator model on name plate , which is different from that in PDD (17C6456-6LA42), as the difference is due to a typo mistake.*

The Internal Combustion Engine & Generator system used by this project is applicable for power generation by utilizing landfill gas.

Flaring system
The surplus gas is destroyed by a flaring system. The combination of power generation and flare will optimize the destruction of landfill gas.

The flare installation used by this project meets all of the necessary conditions that are required by "Tool to determine project emissions from flaring gases containing methane" option a) for a default value of 90% for flare efficiency with continuous monitoring of compliance with the flare manufacture specifications.

SCC has provided technical support to Nanjing Shunfeng-Pioneer to help them design and manufacture enclosed flare according to international technology and standards.

Below is a summary of the technical specifications of the flare:

Parameters	**Flare**
Type	Enclosed Flare
Quantity	1
Capacity	1000 Nm^3/h
Flare Temperature (°C)	500-1200°C
Methane Combustion Efficiency	>98%
Manufacturer	Nanjing Shunfeng-Pioneer

Specification of the installed monitoring equipment is detailed in the tables included in section D.

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

- Baseline methodology ACM0001 (Version 05) – "Consolidated baseline methodology for landfill gas project activities";
- Monitoring methodology ACM0001 (Version 05) – "Consolidated monitoring methodology for landfill gas project activities";
- AMS.I.D – "Grid-connected electricity generation from renewable sources (version 12)";
- "Tool for the demonstration and assessment of additionality" (Version 03);

- "Tool to determine project emissions from flaring gases containing methane" as adopted during EB28.

A.6. Registration date of the project activity:

The project was Registered on 26/05/2008.

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

A fixed 10 year crediting period was chosen for the project activity. The start date of the crediting period was 01/06/2008, which is the same date shown in the registered PDD.

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

Mr. Gareth Phillips
Chief Climate Change Officer
Sindicatum Carbon Capital (SCC)
33 Duke Street
London, UK
Tel: +44 (0) 20 7224 7555
Email: ccsecretariat@carbon-capital.com
jay.mariyappan@sindicatum.com

Jay Mariyappan
Managing Director, Climate Change Delivery

SECTION B. Implementation of the project activity

B.1. Implementation status of the project activity

Landfill gas has been extracted and combusted by flare since the project's first day of operation, which is on 28 May 2008. During the period from 1 June 08 to 15 November 2009, which is covered by previous monitoring reports, there was no electricity generated or exported to the grid, due to the incompletion of the electricity transmitting line and grid connection.

Electricity was first generated and exported to the gird in the early March 2010, comprising 2 sets of 500kW Internal Combustion Engine & Generator system. The 3rd and 4th electricity generators were added to the project in September 2010, completing the project installation as described in the PDD. All four engines have been in full operation throughout this monitoring period. When an engine requires maintenance and is off-line, excess LFG is diverted to flare. Within this monitoring period excess LFG, more LFG than required for consumption by 4 engines, was extracted from landfill site and it was also combusted by flare in conjunction with power generation.

Therefore, emission reductions of methane destroyed by both flare and power generation occurred within this monitoring period and emission reductions calculated for both types of LFG destruction are included in this monitoring report.

This is the sixth monitoring report. The monitoring period covered by this monitoring report is: 25th Feb 2011 – 24th August 2011 (inclusive).

Throughout the monitoring period the engines were subject to routine maintenance and repair and were consequently offline for varying durations depending upon the works being undertaken. The individual engine operating hours for the monitoring period are given in the Table D.2.

Information regarding replacement schedule of monitoring equipment can be referred to Annex E.

Special events of the project activity during this monitoring period are detailed in Annex F.

No events or situations which may impact the applicability of the methodology occurred during this monitoring period.

B.2. Revision of the monitoring plan

There have been no revisions to the monitoring plan.

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

There have been no requests for deviation applied to this monitoring period.

B.4. Notification or request of approval of changes

There have been no notifications or requests of approval of change for the project activity as described in the Registered CDM-PDD.

SECTION C. Description of the monitoring system

The parameters monitored and the monitoring procedure applied for determination of the emission reductions is described in detail in section B.7.1 of the Project Design Document Version 06 dated 27th February 2008, and available on the UNFCCC website: (http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1204619462.35/view).

Law and regulations about waste management systems in China since the registration of the project are monitored and described in Annex C.

An overview of the parameters monitored is provided in **Section D**. The location of measurement devices is presented in figure B.4-1 below:

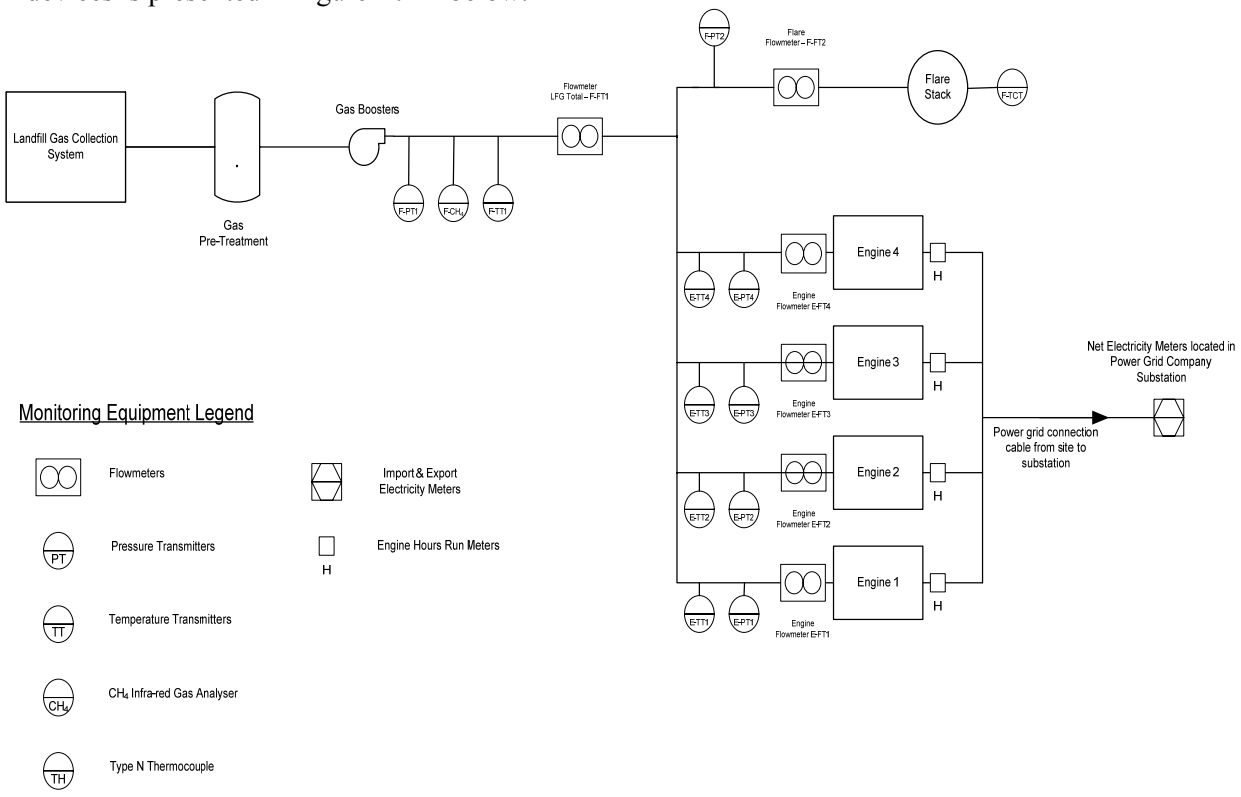


Figure B.4-1 – Location of the measurement devices

The monitoring methodology is based on direct measurement of the amount of landfill gas captured and destroyed at the flare and the electricity generating unit(s). The monitoring plan provides for continuous measurement of the quantity and quality of LFG flared and utilized for power generation. The main variables that need to be determined are the quantity of methane destroyed ($MD_{project,y}$), quantity of methane flared ($MD_{flared,y}$), the quantity of methane used to generate electricity ($MD_{electricity,y}$), and the quantity of methane captured ($MD_{total,y}$).

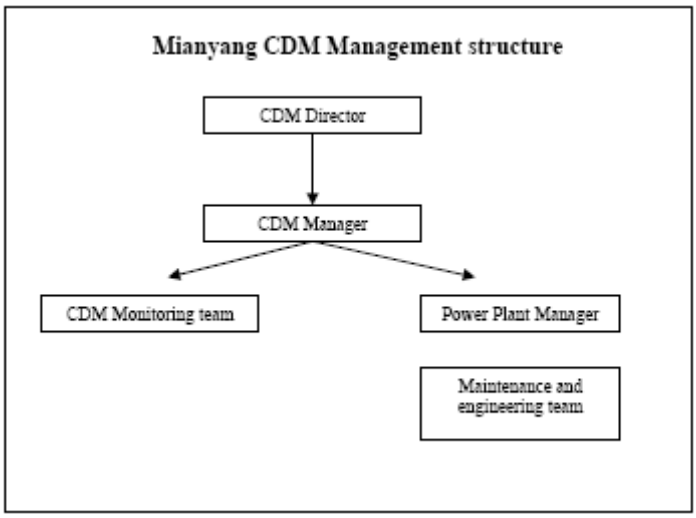
Landfill gas flow, methane concentration, gas pressure and gas temperature are continuously measured using electronic equipment. The data is archived in a computer. Gas pressure is measured as absolute pressure using a pressure transmitter. All CDM related monitoring equipment is maintained as per manufacturer specifications and calibrated as per Chinese National standards.

Equipment calibration information is detailed in the table of section D and calibration certificates of monitoring equipment can be provided for the purpose of verification.

Methane flow and concentration are measured electronically on a continuous basis and recorded every minute in order to calculate methane mass flow. The flow monitoring system is composed of a V-Cone volumetric flow meter sited on the main methane supply pipe upstream of the gas pre-treatment facility following the gas booster. Further flow monitoring consists of V-Cone gas flow meters on each of the engine supply branches and the inlet supply pipe to the flare stack. The landfill gas concentration is metered at a location sited upstream of pre-treatment facility, following the gas boosters, on the pressure side of the plant. Pressure and temperature are also monitored in order to allow for corrections of methane density that are used in the calculation of mass flow.

Import and export power is measured at the grid substation using a standard electricity meter. The meter is installed and maintained by local Power Grid Company as per Chinese National standards. Power supply to/from the grid is recorded by the Power Grid Company on a monthly basis and the export power measured at the Power Grid Company substation is the net of the power consumed by the LFG utilisation equipment and transmission losses to this point.

A monitoring plan has been implemented to ensure that the approved monitoring methodology, ACM0001 version 05, is correctly implemented in order to enable the accurate and transparent determination of avoided emissions. The plan incorporates the QA/QC procedures described in Section D below.



Responsibility and CDM management: A CDM Project Manager is appointed with responsibility for monitoring all Project related activities and organising training. The CDM Project Manager is responsible for overseeing the implementation of this procedure. Competency requirements for the position of Project Manager are defined and applied to ensure that the Project Manager is able to implement this procedure.

All calculations are checked and signed off by the CDM Project Manager who is also be responsible for preparing and checking the documents required for verification.

A CDM monitoring team report directly to the CDM Project Manager and who have day to day responsibilities for checking instrumentation, record keeping, data handling and data processing,

filing, reporting, organizing repair and maintenance of monitoring equipment and ensuring the monitoring plan is adhered to as indicated in the approved PDD. The monitoring staff have received technical training and refresher training as well as safety training to minimise exposure to workplace hazards. At least one fully trained technical member of the monitoring team will be present on every shift.

A management level link has been established to ensure effective co-operation between landfill staff and CDM monitoring staff.

All relevant information, notes of meetings, data files, maintenance records, defect reports, hard copy and computerised records of monitoring are kept at a designated location and arranged in an orderly and transparent manner to facilitate auditing as and when required.

Responsibilities, procedures, methods, equipment types and specifications are described in detail in a site-specific CDM monitoring manual.

On-line monitoring system: All key meters required to determine GHG emissions and emission reductions are monitored from a central control point which records meter readings at a pre-determined interval as specified in the CDM monitoring manual. These data are used to continually update total emission reductions as long as the generating plants are in operation.

Key meters measure the parameters listed in Section D.

Calculation of avoided emissions:

The data required for calculating baseline and project emissions are fed into a processor (spreadsheet application) which calculates the emission reductions according to the formulae described below (E.4), where required using the defined default values. Access to the spreadsheet is controlled for security. The process includes various checks, such as a comparison of total methane consumed against total power generated and will be regularly audited to ensure it is operating correctly.

Non essential data
The on-line monitoring system also records “non-essential” data. Such data is termed non-essential because it is not directly listed in the CDM Monitoring Methodology, but it constitutes a means of corroborating the on-line system. Non-essential data includes measurements of gross output from individual generators, certificated conversion efficiency and any other data considered relevant to the project activity.

Accuracy and calibration of instruments
All meters are maintained as specified in the CDM monitoring manual according to manufacturer specifications. All key meters are subject to a quality control regime that includes regular maintenance and calibration. A record is maintained showing the location and unique identification number of each meter, the calibration status of that meter (when last calibrated, when next due for calibration) and who performs the calibration service. Calibration certificates will be retained for all meters until two years after the end of the crediting period.

Mass flow of methane supplied to the engines is corroborated by comparison with the sum of the gross engine power outputs, the relationship being a function of engine efficiency which can be considered a constant under the proposed maintenance regime.

Archiving of data
The on-line system automatically archives data to a secure and retrievable storage format on a periodic e.g., monthly basis. Calibration records are archived in an accessible electronic format. This data will be stored until 2 years after the end of the crediting period.

Document Control
The CDM Project Manager has implemented a document control system that ensures that the current versions of necessary documents are available at the point of use.

Preparation of monitoring report
The archived / live data is used to prepare a periodic monitoring report to be submitted to the CDM EB for verification and issuance of CERs.

Manual data recording system
The CDM monitoring team implements a manual data recording system to act as a back-up for the on-line system. This involves completion of a daily log sheet that records flow meter readings at the start of the day. Spot readings of other values (methane content, temperature and pressure) are also recorded periodically and at the times when flow meter readings are taken. At minimum one set of manual readings are taken directly from the meters each day, and used to check the read-outs in the control room. These log sheets act as a back-up for total volume combusted and a means of estimating other essential data in the event of a prolonged failure of the on-line system. Prolonged failure will constitute more than 24 hours (cumulative) without on-line monitoring.

Treatment of missing or corrupted data

Where data in the on-line system is corrupted or missing, whilst the generators are operating (as shown, for example, by electricity output) the missing data can be estimated by taking the lower of the average value for the parameter in question in the hour before the error arose or the hour immediately after the system came on-line again. If there is evidence to suggest that both of these values are un-representative, the average from the previous 24 hours will be used.

Any error is recorded in the daily log sheet and the occurrence of the error is investigated and rectified as soon as possible. If the on-line system is compromised for more than 24 hours, data is manually recorded.

Any deficiencies in methane flow monitoring data would be rectified by back calculation from power generation data.

Audit function and management review
The CDM Project Manager arranges for an audit of the management system once per year. The auditor is not involved in the daily operation of the project and if necessary, may be sourced from a third party. The auditor assesses the implementation of the monitoring procedures and the preparation of the monitoring report. Audit findings, and steps taken to address findings are recorded and reviewed in a Management Review meeting (convened at least annually) at which time the effectiveness of these procedures was reviewed and necessary changes implemented. The latest Management review meeting was held in March 2011 and the last audit was conducted in April 2011 the details and findings of each are available for the DOE to inspect during verification.

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:	GWP_{CH4}
Data unit:	tCO_2e/tCH_4
Description:	Global warming potential of methane
Source of data used:	IPCC
Value(s):	21
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	This data is used for baseline and project emission reduction calculations.
Additional comment:	-

Data / Parameter:	D_{CH4}
Data unit:	tCH_4/ CH_4m^3
Description:	Density of methane
Source of data used:	ACM0001, version 05
Value(s):	0.0007168 (at standard temperature and pressure: 0 degree Celsius and 1,013 bar) This data will be corrected for actual temperature and pressure according to the formula V1P1/T1 = V2P2/T2.
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	This data is used for emission reduction calculations.
Additional comment:	

Data / Parameter:	$EF_{OM,}$
Data unit:	tCO_2/ MWh
Description:	Operation Margin Emission Factor of Central China Power Grid
Source of data used:	Calculated according to ACM0002 (ver 5) by EB guidance Notification on Determining Baseline Emission Factor of China's Power Grid 2007, http://cdm.ccchina.gov.cn/web/main.asp?ColumnId=3
Value(s):	1.2899
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	This data is used for emission reduction calculations.
Additional comment:	-

Data / Parameter:	$EF_{BM,}$
Data unit:	tCO2/ MWh
Description:	Built Margin Emission Factor of Central China Power Grid

Source of data used:	Calculated according to ACM0002 (ver 5) by EB guidance Notification on Determining Baseline Emission Factor of China's Power Grid 2007, http://cdm.ccchina.gov.cn/web/main.asp?ColumnId=3
Value(s):	0.6592
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	This data is used for emission reduction calculations.
Additional comment:	-

Data / Parameter:	$CEF_{ELEC,}$
Data unit:	tCO2/ MWh
Description:	Built Margin Emission Factor of Central China Power Grid
Source of data used:	Calculated according to ACM0002 (ver 5) by EB guidance Notification on Determining Baseline Emission Factor of China's Power Grid 2007, http://cdm.ccchina.gov.cn/web/main.asp?ColumnId=3
Value(s):	0.97455
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	This data is used for emission reduction calculations.
Additional comment:	-

D.2. Data and parameters monitored	
Data / Parameter:	$LFG_{total,y}$
Data unit:	m^3
Description:	Total quantity of landfill gas captured in year y
Measured /Calculated /Default:	Measured
Source of data:	Flow meter readings
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Kingways V-Cone Flow Meter – Model KVS with associated Rosemount 3051CD differential pressure transmitter. See specification details in Annex D • Two yearly calibration by a qualified Institute (Chinese National Standard (JJG 640 -1994)) • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/ Recording frequency:	Continuous measuring/recorded every minute Data to be aggregated monthly and yearly.
Calculation method (if applicable):	N.A
QA/QC procedures applied:	Staff have received the required CDM and monitoring training.

	Data is backed up and archived, where it is stored for two years longer than the crediting period or two years after the last issuance of CERs. For internal cross checking purposes the consistency of flow measurements is checked by examining the hourly flow balance. The conservative value will be used for ER calculation. $(LFG_{flare,h} + LFG_{electricity,h}) = LFG_{total,h}$ Flow meter is calibrated according to the manufacturer's specifications or Chinese National Standards. Calibrations are carried out by the manufacturer or a suitably qualified external company or institute. Calibration and maintenance records are retained.

Data / Parameter:	$LFG_{electricity,y}$
Data unit:	m^3
Description:	Total amount of landfill gas combusted in power plant in year y
Measured /Calculated /Default:	Measured
Source of data:	Flow meter on the inlet to each generator
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Kingways V-Cone Flow Meter – Model KVS with associated Rosemount 3051CD differential pressure transmitter. See specification details in Annex D • Two yearly calibration by a qualified Institute (Chinese National Standard (JJG 640 -1994)) • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/ Recording frequency:	Continuous measuring/reading every minute. Data to be aggregated monthly and yearly.
Calculation method (if applicable):	N.A
QA/QC procedures applied:	Staff have received receive the required CDM and monitoring training. Data is backed up and archived, where it is stored for two years longer than the crediting period or two years after the last issuance of CERs. For internal cross checking purposes the consistency of flow measurements is checked by examining the hourly flow balance. The conservative value will be used for ER calculation. $(LFG_{flare,h} + LFG_{electricity,h}) = LFG_{total,h}$ Flow meter is calibrated according to the manufacturer's specifications or Chinese National Standards. Calibrations are carried out by the

	manufacturer or a suitably qualified external company or institute. Calibration and maintenance records are retained.

Data / Parameter:	$LFG_{flare,y}$ (The same as $FV_{RG,h}$, different nomenclature for ACM0001 (version 05) and "Tool to determine project emissions from flaring gases containing methane".)
Data unit:	m^3
Description:	The quantity of landfill gas fed into the flare
Measured /Calculated /Default:	Measured
Source of data:	Flow meter on the inlet to flare
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Kingways V-Cone Flow Meter – Model KVS with associated Rosemount 3051CD differential pressure transmitter. See specification details in Annex D • Two yearly calibration by a qualified Institute (Chinese National Standard (JJG 640 -1994)) • Installation and Calibration dates are provided in Annex E
Measuring/ Reading/ Recording frequency:	Continuous measuring/reading every minute. Data to be aggregated monthly and yearly.
Calculation method (if applicable):	N.A
QA/QC procedures applied:	Staff have received receive the required CDM and monitoring training. Data is backed up and archived, where it is stored for two years longer than the crediting period or two years after the last issuance of CERs. For internal cross checking purposes the consistency of flow measurements is checked by examining the hourly flow balance. The conservative value will be used for ER calculation. $(LFG_{flare,h} + LFG_{electricity,h}) = LFG_{total,h}$ Flow meter is calibrated according to the manufacturer's specifications or Chinese National Standards. Calibrations are carried out by the manufacturer or a suitably qualified external company or institute. Calibration and maintenance records are retained.

Data / Parameter:	$\omega_{CH4,y}$ (The same parameter as $fv_{i,h,}$; $fv_{CH\ 4,RG,h}$ different nomenclature for ACM001(version 05) and "Tool to determine project emissions from flaring gases containing methane".)
Data unit:	m^3CH_4/m^3LFG
Description:	Average value of the concentration of methane in landfill gas.
Measured /Calculated	Measured

/Default:	
Source of data:	Gas analyser reading
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Edinburgh Instruments Limited, Guardian Plus Infra-Red Gas Monitor. See specification details in Annex D • Annual calibration by one of the manufacturers approved service facilities or a suitably qualified Institute, as per manufacturers' recommendations or Chinese National Standards (JJG 693 -2004) as appropriate. • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/ Recording frequency:	Continuous measuring/reading every minute Data to be aggregated monthly and yearly.
Calculation method (if applicable):	N.A
QA/QC procedures applied:	Routine checks are performed by SCC CDM Monitoring Team to ensure proper functioning of the equipment. Any faults are reported to the CDM Manager for action. Monthly zero check using atmospheric air or nitrogen. Monthly site gas span undertaken using certified calibration gas. Gas analyser maintained and calibrated as per manufacturers recommendations. Data is backed up and archived where it will be stored for the longer of two years longer than the crediting period or two years after the last issuance of CERs.

Data / Parameter:	$EL_{EX,LFG}$
Data unit:	MWh
Description:	Total amount of electricity exported out of the project boundary
Measured /Calculated /Default:	Measured
Source of data:	Electricity meter readings on sub-station connecting generators to the grid
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Red Phase MK6 3×57.7/100V 3×1.5(6)A with accuracy Class 0.5S. See specification details in Annex D • Every 5 years calibration done to Chinese Standard JJG596-1999 by the Power Grid Company or suitably qualified Institute, as assigned by them • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/	Continuously measured,

Recording frequency:	Data to be aggregated monthly and yearly.
Calculation method (if applicable):	N.A
QA/QC procedures applied:	The electricity meters meet the relevant Chinese standards. They are maintained and calibrated according to manufacturer's instructions or the relevant Chinese or Grid Company regulations. Data is archived for 2 years after the crediting period or two years after the last issuance of CERs. The data can be corroborated against financial data from the export of power to the grid.

Data / Parameter:	EL_{IMP}
Data unit:	MWh
Description:	Total amount of electricity imported to meet project requirement
Measured /Calculated /Default:	Measured
Source of data:	Electricity meter readings on sub-station
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Red Phase MK6 3×57.7/100V 3×1.5(6)A with accuracy Class 0.5S. See specification details in Annex D • Every 5 years calibration done to Chinese Standard JJG596-1999 by the Power Grid Company or suitably qualified Institute, as assigned by them • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/ Recording frequency:	Continuously measured, data aggregated monthly
Calculation method (if applicable):	N.A
QA/QC procedures applied:	The electricity meters meet the relevant Chinese standards. They are maintained and calibrated according to manufacturer's instructions or the relevant Chinese or Grid Company regulations. Data is archived for 2 years after the crediting period or two years after the last issuance of CERs. The data can be corroborated against financial data from the import of power to the grid.

Data / Parameter:	*Annual operation hours*
Data unit:	h/year
Description:	Annual operating hours of the generators
Measured /Calculated /Default:	Measured

Source of data:	Hours run meters on each individual engine by project developer
Value(s) of monitored parameter:	Engine #1 : 4224 hrs Engine #2 : 3536 hrs Engine #3 : 4056 hrs Engine #4 : 4228 hrs
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Corroboration for emission reductions calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N.A
Measuring/ Reading/ Recording frequency:	Annually
Calculation method (if applicable):	N.A
QA/QC procedures applied:	N.A

Data / Parameter:	*P*
Data unit:	Pa
Description:	Pressure of the LFG captured
Measured /Calculated /Default:	Measured
Source of data:	Pressure transmitter mounted in the gas pipe work between the gas treatment package and the generator sets / flares.
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Rosemount Absolute Pressure Transmitter – Model 3051TA. See specification details in Annex D. • Annual calibration by a suitably qualified Institute, as per Chinese National Standard (JJG 882 – 204). • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/ Recording frequency:	Continuous measuring/reading every minute Data to be aggregated monthly and yearly.
Calculation method (if applicable):	N.A
QA/QC procedures applied:	Routine checks are performed by SCC CDM Monitoring Team to ensure proper functioning of the equipment. Any faults are reported to the CDM Manager for action. Pressure Transmitter maintained and calibrated as per manufacturers recommendations or Chinese National Standards. Data is backed up and archived where it will be stored for the longer of two years longer than the crediting period or two years after the last issuance of CERs.

Data / Parameter:	$T_{total,y}$
Data unit:	℃
Description:	Temperature of the landfill gas
Measured /Calculated /Default:	Measured
Source of data:	Temperature probe in gas pipe.
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Nanjing Wanda Instruments – Model WZP-241 PT100B. See specification details in Annex D • Annual calibration by a qualified Institute (Chinese National Standard (JJG229-1998)). • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/ Recording frequency:	Continuous measuring/reading every minute
Calculation method (if applicable):	N.A
QA/QC procedures applied:	Routine checks are performed by SCC CDM Monitoring Team to ensure proper functioning of the equipment. Any faults are reported to the CDM Manager for action. Temperature Transmitter maintained and calibrated as per manufacturers recommendations or Chinese National Standards. Data is backed up and archived where it will be stored for the longer of two years longer than the crediting period or two years after the last issuance of CERs.

Data / Parameter:	T_{flare}
Data unit:	℃
Description:	Temperature of the flue gas of the flare
Measured /Calculated /Default:	Measured continuously
Source of data:	Temperature thermocouple
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation and flare efficiency calculation.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	• Nanjing Wanda Instrument Company, Type N Thermocouple – WRMK-331. See specification details in Annex D • Annual calibration to Chinese National Standard (JJG351-1996). • Installation and Calibration dates are provided in Annex E.
Measuring/ Reading/ Recording frequency:	Continuous measuring/reading every minute
Calculation method (if applicable):	N.A

QA/QC procedures applied:	Routine checks are performed by SCC CDM Monitoring Team to ensure proper functioning of the equipment. Any faults are reported to the CDM Manager for action. Thermocouple maintained and calibrated as per manufacturers recommendations or Chinese National Standards. Data is backed up and archived where it will be stored for the longer of two years longer than the crediting period or two years after the last issuance of CERs.

Data / Parameter:	PE_{flare}
Data unit:	tCO_2
Description:	Emission caused by methane not being destroyed in the course of flaring in year y
Measured /Calculated /Default:	Calculated
Source of data:	Calculated
Value(s) of monitored parameter:	Refer to Emission Reductions spreadsheets
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	For emission reduction calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N.A
Measuring/ Reading/ Recording frequency:	N.A
Calculation method (if applicable):	The parameters to be calculated as per "Tool to determine project emissions from flaring gases containing Methane". Referred to Annex B
QA/QC procedures applied:	Regular maintenance should ensure optimal operation of flares. The enclosed flare shall be operated and maintained as per the specifications prescribed by the manufacturer.

Data / Parameter:	Laws and regulations about waste management system in China
Data unit:	-
Description:	Some relevant laws and regulations about solid waste management system in China should be monitored yearly. If there are relevant changes, the baseline scenario or monitoring plan will changed accordingly.
Measured /Calculated /Default:	Measurements by project participants
Source of data:	Regular follow-up of law and regulations by project participants (e.g. governmental publications, official communications, official journal, conferences)
Value(s) of monitored parameter:	N/A
Indicate what the data are used for (Baseline/ Project/	For emission reduction calculation

Leakage emission calculations)	
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A
Measuring/ Reading/ Recording frequency:	Annually
Calculation method (if applicable):	N/A
QA/QC procedures applied:	-

SECTION E. Emission reductions calculation

E.1. Baseline emissions calculation

There is no need to do the baseline emissions calculation in accordance with ACM0001 (version 05).

E.2. Project emissions calculation

There is no need to do the project emissions calculation in accordance with ACM0001 (version 05).

E.3. Leakage calculation

No leakage effects need to be accounted under this methodology ACM0001 (version 05).

E.4. Emission reductions calculation / table

Emission reductions are calculated using ACM0001 (version 05), as follows:

$$\mathbf{ER_y = (MD_{project,y} - MD_{reg,y}) * GWP_{CH4} + EL_y * CEF_{electricity,y} - Ety * CEF_{thermal,y}} \quad \mathbf{(1)}$$

Where:

ER_y = Emission reduction (tCO_2e)

$MD_{project,y}$ = Amount of methane that would have been destroyed/combusted during the year (tCH_4)

$MD_{reg,y}$ = In the absence of the project (tCH_4) (current requirement in China under Chinese Standard GB16889-2008 has no impact on this project as the site was operational before the standard introduction date takes effect) therefore MDreg,y=0

GWP_{CH4} = Global Warming Potential value for methane for the first commitment period is 21 tCO_2e/ tCH_4

EL_y = Net quantity of electricity exported during year y (MWh),

Ety= Incremental quantity of fossil fuel, defined as difference of fossil fuel used in the baseline and fossil fuel use during project, for energy requirement on site under project activity during year y (TJ), there is no thermal energy use on site due to the project therefore Ety=0

$CEF_{electricity,y}$ = CO_2 emissions intensity of the electricity displaced (tCO_2e/ MWh),

$$\mathbf{So\ ER_y = MD_{project,y} * GWP_{CH4} + EL_y * CEF_{electricity,y}} \quad \mathbf{(2)}$$

$$\mathbf{MD_{project,y} = MD_{flared,y} + MD_{electricity,y}} \quad \mathbf{(3)}$$

Where:
$MD_{flared,y}$ = amount of methane destruction in flares during the year y ;
$MD_{electricity,y}$ = amount of methane destruction in power plant during the year y ;

$$\mathbf{EL_y = EL_{EX,LFG} - EL_{IMP}} \quad \mathbf{(4)}$$

Where:
$EL_{EX,LFG}$ = total amount of electricity exported out of the project boundary (MWh),
EL_{IMP} = total amount of electricity imported to meet project requirement (MWh),

$$\mathbf{MD_{electricity,y} = LFG_{electricity,y} * w_{CH4,y} * D_{CH4}} \quad \mathbf{(5)}$$

Where:
$LFG_{electricity,y}$ = quantity of LFG destroyed by the generators in m^3
$w_{CH4,y}$ = average concentration of methane in LFG (m^3CH_4/m^3LFG)
D_{CH4} = density of methane (tCH_4/m^3)

Combustions efficiency for generators has a default value of 0.995.
Including it in this equation takes account of the fact that $LFG_{electricity,y}$ is measured at the inlet to the generator.

$$\mathbf{MD_{flared,y} = (LFG_{flare,y} * w_{CH4,y} * D_{CH4}) - (PE_{flare\ y} / GWP_{CH4})} \quad \mathbf{(6)}$$

Where:
$LFG_{flared,y}$ = quantity of landfill gas fed to the flare during the year measured in cubic meters (m^3),
$w_{CH4,y}$ = the average methane fraction of the landfill gas as measured during the year and expressed as a fraction (m^3CH_4/m^3LFG);
D_{CH4} = methane density, (tCH_4/m^3 CH4)
$PE_{flare,y}$ = the project emissions from flaring of the residual gas stream in year y (tCO_2e)

$$PE_{flare,h} = \sum_{h=1}^{8760} (LFG_{flare,h} * w_{CH4,h} * D_{CH4}) * (1 - \eta_{flare,h}) * (\frac{GWP_{CH4}}{1000}) \quad \mathbf{(7)}$$

Where:
$LFG_{flared,h}$ = quantity of landfill gas fed to the flare during the hour measured in cubic meters (m^3),
$w_{CH4,h}$ = the average methane fraction of the landfill gas as measured during the hour and expressed as a fraction (m^3CH_4/m^3LFG);
$\eta_{flare,\ h}$ = flare efficiency in hour *h*

In the above formula, $LFG_{flare,y}$, $LFG_{flared,h}$, $w_{CH4,y}$, $w_{CH4,h}$ and $\eta_{flare,\ h}$ has been confirmed ex-post during project implementation.

The value of D_{CH4} under standard temperature and air pressure (1.013bar and 0°C) is 0.0007168 tCH_4/m^3CH_4.

See registered PDD section 6.1 for detailed information.
(http://cdm.unfccc.int/UserManagement/FileStorage/XGU2AI2NUU636EYTJ5P18XMRZFIHZ8).

Calculation sheet is attached as Annex A to this report.

The following table shows monthly net methane destruction attribute to the project activity and total emission reductions completed associated with project activity in this monitoring period.

Table 1. Monthly net methane destruction attribute to the project activity

Date		The amount of methane that have been destroyed in the project scenario (tCH_4)	The amount of methane that have been destroyed in the absence of the project (tCH_4)	Net methane destruction attributable to the project activity (tCH_4)	Net methane destruction attributable to the project activity (tCO_2)
		$MD_{project.\ month}$	$MD_{BL,\ month}$	$MD_{project,\ month} - MD_{BL,\ month}$	$=(MD_{project,\ month} - MD_{BL,\ month})*GWP_{CH4}$
2011-2-25	2011-2-28	41.44	0.00	41.44	870
2011-3-1	2011-3-31	350.24	0.00	350.24	7,355
2011-4-1	2011-4-30	344.15	0.00	344.15	7,227
2011-5-1	2011-5-31	331.53	0.00	331.53	6,962
2011-6-1	2011-6-30	316.30	0.00	316.30	6,642
2011-7-1	2011-7-31	388.47	0.00	388.47	8,158
2011-8-1	2011-8-24	347.24	0.00	347.24	7,292
Total (25 February 11 ~ 24 August 11 inclusive)					**44,506**

Table 2. The net amount of electricity exported to the grid

Date		Total amount of electricity exported (MWh)	CO_2 emissions intensity of the baseline source of electricity displaced (tCO_2e/MWh)	CO_2 emissions intensity (exported electricity) (tCO_2e)
		$EL_{EX,\ month}$	$CEF_{elec,\ BL,\ month}$	
2011-2-25	2011-8-24	**6020**	**0.97455**	**5867**

Table 3. The net amount of electricity imported for the project purpose

Date		Total amount of electricity imported (MWh)	CO_2 emissions intensity of the baseline source of electricity displaced (tCO_2e/MWh)	CO_2 emissions intensity (exported electricity) (tCO_2e)
		$EL_{IM,\ month}$	$CEF_{elec,\ BL,\ month}$	
2011-2-25	2011-8-24	**0.71**	**0.97455**	**0.69**

Table 4. Total Emission reductions of the monitoring period

Reporting Period	Net methane destruction attributable to the project activity (tCO_2)	CO_2 emissions intensity (imported electricity) (tCO_2e)	CO_2 emissions intensity (exported electricity) (tCO_2e)	Emission reductions (tCO_2e)
Total (25 February 11 ~ 24 August 11 inclusive)	**44,506**	**1**	**5,867**	**50,372**

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

Item	Values applied in ex-ante calculation of the registered CDM-PDD	Actual values reached during the monitoring period
Emission reductions (tCO_2e)	**= (124,596*181/365) = 61,786**	**50,372**

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

There is no increase in the actual emission reductions achieved during the current monitoring period from that stated in the registered CDM-PDD. The ex-ante emission reduction estimate of the registered PDD estimates a total of 61,786 tCO2e for the current monitoring period (calculation as per table in section E.5), however only 50,372 ER have actually been generated during the current monitoring period. The shortfall in ER's is due to reduced engine outputs from those assumed in the PDD and the general variability of landfill gas generation models in predicting LFG availability.

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Annex A Emission Reductions Calculation Sheets

Separate Mianyang emission reductions calculation spreadsheets are provided for the purpose of verification.

Annex B Flare Efficiency

The determination of project emissions from flaring gases containing methane is described in the registered PDD page 19 onwards (http://cdm.unfccc.int/UserManagement/FileStorage/XGU2AI2NUU636EYTJ5P18XMRZFIHZ8).

Determination of the hourly flare efficiency:

In case of enclosed flares and use of the default value for the flare efficiency, the flare efficiency in the hour h (h*flare,h*) is:

- 0% if the temperature in the exhaust gas of the flare (T_{flare}) is below 500°C for more than 20 minutes during the hour h.
- 50%, if the temperature in the exhaust gas of the flare (T_{flare}) is above 500°C for more than 40 minutes during the hour h, but the manufacturer's specifications on proper operation of the flare are not met at any point in time during the hour h.
- 90%, if the temperature in the exhaust gas of the flare (T_{flare}) is above 500°C for more than 40 minutes during the hour h and the manufacturer's specifications on proper operation of the flare are met continuously during the hour h.

The assessment of the hourly flare efficiency using the above described criteria for the dataset covering the monitoring period has been verified by the DOE at the time of the site visit. The parameters measured (volumetric flow rate, flare temperature, LFG CH_4 concentration) in order to ensure the flare was operating within the manufacturer's specifications were recorded hourly and listed in the excel spreadsheet for the reported period as uploaded at the UNFCCC website. The default value used for flare efficiency in each hour for the reporting period was also included in this excel spreadsheet. The specifications of the flare are summarized in A.4 and made available to the DOE. Any high temperatures measured (above 700ºC) as mentioned in the "Tool to determine project emissions from flaring gases containing methane" version 1, indicate that the flare is still operating adequately as long as it is between 500-1200ºC and within the other parameter ranges set out in the flare specification.

Annex C Monitored Laws and Regulations

Regulation reference	Regulation	Impact	Date of application
GB16889-1997	"Standard for Pollution Control on the Landfill Site of Municipal Solid Waste"	Included in PDD	01-Jan-98
GB16889-2008	"Standard for Pollution Control on the Landfill Site of Municipal Solid Waste"	No impact on parameters monitored during the current crediting period. The methodology requires the impacts of new regulations to be considered at the renewal of the crediting period. The project has a fixed crediting period of 10 years and will not be renewed. Furthermore, the regulation is an E-type regulation according Annex 3 of EB 22.	01-Jul-08

Annex D Specification of CDM Monitoring Equipment

Parameter	Instrument Type	Manufacturer	Instrument Model	Instrument Range	Accuracy	Calibration Requirements
$LFG_{total,y}$	V-Cone Flow Meter	Kingways	KVS08IIKC23FSN with Rosemount 3051 CD Differential Pressure Transmitter	180-1800m^3/hr	±0.5%	2 yearly
$LFG_{flare,y}$	V-Cone Flow Meter	Kingways	KVS08IIKC23FSN with Rosemount 3051 CD Differential Pressure Transmitter	100-1000m^3/hr	±0.5%	2 yearly
$LFG_{electricity,y}$	V-Cone Flow Meter	Kingways	KVS04IIKC23FSN with Rosemount 3051 CD Differential Pressure Transmitter	50-500m^3/hr	±0.5%	2 yearly
$\omega_{CH4,y}$	Infra Red Gas Analsyer	Edinburgh Instruments Limited	Guardian Plus Infra-Red Gas Monitor	0-100%	± 2.5% Full Scale Deflection	Annually
$T_{total,y}$	Temperature Transmitter	Nanjing Wangda	WZP-241	-20 to 450˚C	±(0.3+0.005|t|)	Annually
P	Absolute Pressure Transmitter	Rosemount	Model 3051TA	0 –207 kPa	± 0.065%	Annually
$EL_{EX,LFG}$	Electric Meter	Redphase	MK6 3×57.7/100V 3×1.5(6)A)	-	Class 0.5S	5 yearly
EL_{IMP}	Electric Meter	Redphase	MK6 3×57.7/100V 3×1.5(6)A)	-	Class 0.5S	5 yearly
T_{flare}	Type N Thermocouple	Nanjing Wangda	WRMK-331	0 to 1200˚C	± 0.004|t|	Annually

Annex E CDM Monitoring Equipment Installation & Calibration Dates

Name	Tag No.	Serial No.	Equipment Start Date*	Equipment End Date*	Calibration Certificate Validity	Certificate Reference
$LFG_{total,y}$	F-FT_1	8031601	25/02/2011	24/08/2011	2010/5/18~2012/5/17	201005000796
$LFG_{flare,y}$	F-FT_2	8031602	25/02/2011	24/08/2011	2010/5/18~2012/5/17	201005000795
$LFG_{electricity,y}$	E-FT_1	100407001	25/02/2011	24/08/2011	2010/5/5~2012/5/4	D10-381-JG-01
	E-FT_2	100407002	25/02/2011	24/08/2011	2010/5/5~2012/5/4	D10-381-JG-02
	E-FT_3	8092301	25/02/2011	16/08/2011	2010/3/8~2012/3/7	201003000797
		8092302	16/08/2011	24/08/2011	2011/7/20~2013/7/19	201107001815
	E-FT_4	100407003	25/02/2011	16/08/2011	2010/5/5~2012/5/4	D10-381-JG-03
		8092303	16/08/2011	24/08/2011	2011/7/20~2013/7/19	201107001817
$\omega_{CH4,y}$	F-CH4	27053	25/02/2011	16/08/2011	2010/9/9~2011/9/8	201009000961
		26949	16/08/2011	24/08/2011	2011/3/15~2012/3/14	201103001092
$T_{total,y}$	F-TT_1	509-TT6	25/02/2011	01/03/2011	2010/5/6~2011/5/5	201005000875
		509-TT12	01/03/2011	16/08/2011	2010/9/10~2011/9/9	201009002974
		509-TT13	16/08/2011	24/08/2011	2011/04/27~2012/4/26	201104005963
	E-TT_1	509-TT7	25/02/2011	01/03/2011	2010/5/6~2011/5/5	201005000875
		509-TT3	01/03/2011	15/08/2011	2010/9/10~2011/9/9	201009002977
		509-TT14	15/08/2011	24/08/2011	2011/4/27~2012/4/26	201104005965
	E-TT_2	509-TT8	25/02/2011	01/03/2011	2010/5/6~2011/5/5	201005000875
		509-TT4	01/03/2011	15/08/2011	2010/9/10~2011/9/9	201009002976
		509-TT15	15/08/2011	24/08/2011	2011/4/27~2012/4/26	201104005967
	E-TT_3	509-TT10	25/02/2011	01/03/2011	2010/5/6~2011/5/5	201005000875
		509-TT11	01/03/2011	16/08/2011	2010/9/10~2011/9/9	201009002975
		509-TT16	16/08/2011	24/08/2011	2011/4/27~2012/4/26	201104005966
	E-TT_4	509-TT9	25/02/2011	28/04/2011	2010/5/6~2011/5/5	201005000875
		509-TT10	28/04/2011	16/08/2011	2011/3/29~2012/3/28	201102008473
		509-TT17	16/08/2011	24/08/2011	2011/4/27~2012/4/26	201104005969
P	F-PT_1	4925643	25/02/2011	16/08/2011	2010/9/8~2011/9/7	201009001637
		4925641	16/08/2011	24/08/2011	2011/3/04~2012/3/3	201103001003
	F-PT_2	4925650	25/02/2011	16/08/2011	2010/9/8~2011/9/7	201009001636
		4925653	16/08/2011	24/08/2011	2011/3/04~2012/3/3	201103001006
	E-PT_1	4888695	25/02/2011	01/03/2011	2010/5/26~2011/5/25	201005005626
		5006234	01/03/2011	15/08/2011	2010/9/8~2011/9/7	201009001639
		4888694	15/08/2011	24/08/2011	2011/3/28~2012/3/27	201103008095
	E-PT_2	4888696	25/02/2011	01/03/2011	2010/5/26~2011/5/25	201005005632
		4925651	01/03/2011	15/08/2011	2010/9/15~2011/9/14	RGpv2010-1590
		4888695	15/08/2011	24/08/2011	2011/3/28~2012/3/27	201103008098
	E-PT_3	5006233	25/02/2011	16/08/2011	2010/9/8~2011/9/7	201009001638
		4888696	16/08/2011	24/08/2011	2011/3/28~2012/3/27	201103008097
	E-PT_4	4925652	25/02/2011	16/08/2011	2010/9/15~2011/9/14	RGpv2010-1591
		5006235	16/08/2011	24/08/2011	2011/3/04~2012/3/03	201103003738
$EL_{EX,LFG}$		207515174	25/02/2011	24/08/2011	2008/7/25~2013/7/24	2008G056
EL_{IMP}		207515174	25/02/2011	24/08/2011	2008/7/25~2013/7/24	2008G056
T_{flare}	TCT	TCT 12	25/02/2011	01/03/2011	2010/5/28~2011/5/27	201005006621
		TCT 14	25/02/2011	01/03/2011	2010/5/28~2011/5/27	201005006612
		TCT 15	25/02/2011	01/03/2011	2010/5/28~2011/5/27	201005006616
		TCT 3	25/02/2011	16/08/2011	2010/9/16~2011/9/15	201009004508
		TCT 4	01/03/2011	16/08/2011	2010/9/16~2011/9/15	201009004528
		TCT 9	01/03/2011	16/08/2011	2010/9/16~2011/9/15	201009004507
		TCT 18	01/03/2011	16/08/2011	2010/9/16~2011/9/15	201009004512
		TCT 15	16/08/2011	24/08/2011	2011/4/6~2012/4/5	201104000718
		TCT 20	16/08/2011	24/08/2011	2011/4/6~2012/4/5	201104000702
		TCT 12	16/08/2011	24/08/2011	2011/4/6~2012/4/5	201104000709
		TCT 22	16/08/2011	24/08/2011	2011/4/6~2012/4/5	201104000712

Note: * - If the equipment is installed prior to or still in operation following the end of, the monitoring period; then the dates provided are those of the monitoing period. Other dates indicate that the equipment was replaced during the monitoring period.

Annex F. Special Events Table and Missing CDM Data

Start Time (UTC)	Finish Time (UTC)	Event/Cause	Impact on ER Calculation
2011-2-28 13:00	2011-3-1 4:00	Failure of the Grid connection to the power plant and CDM monitoring equipment replacement	No methane destruction via Project(MD project=0)
2011-3-16 07:00	2011-3-16 11:00	Failure of the Grid connection to the power plant	No methane destruction via Project(MD project=0)
2011-4-19 3:00	2011-4-19 4:00	Maintenance of Gensets	No methane destruction via Engine (MD electricity = 0)
2011-4-28 4:10	2011-4-28 4:20	Replacement of temperature transmitter for engine 4	Missing readings are replaced by previous average values
2011-6-17 21:00	2011-6-18 1:00	Failure of the Grid connection to the power plant	No methane destruction via Project(MD project=0)
2011-6-20 8:03	2011-6-20 8:29	Maintenance of Gensets	No methane destruction via Engines (MD electricity=0)
2011-7-1 19:00	2011-7-1 22:00	Failure of the Grid connection to the power plant	No methane destruction via Project(MD project=0)
2011-7-12 17:00	2011-7-12 17:00	Failure of the Grid connection to the power plant	No methane destruction via Project(MD project=0)
2011-7-28 1:00	2011-7-28 2:00	Failure of the Grid connection to the power plant	No methane destruction via Project(MD project=0)
2011-8-16 1:00	2011-8-16 5:00	Replacement of CDM monitoring equipment and maintenance of pre-treatment plant	No methane destruction via Project(MD project=0)