

---

# VERIFICATION AND CERTIFICATION REPORT

---

**South Pole Carbon Asset Management  
Ltd.**

**Suzhou Qizi Mountain Landfill Gas  
Recovery Project  
(GS Ref. No. 397)**

---

**SGS Climate Change Programme**

SGS United Kingdom Ltd  
SGS House  
217-221 London Road  
Camberley Surrey  
GU15 3EY  
United Kingdom

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                                                             |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------|--|
| <b>Date of Issue:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | <b>Project Number:</b>                                                                                                      |  |
| 15/03/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              | CCP.VOL0702 GS MP3                                                                                                          |  |
| <b>Project Title:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                                                                                                                             |  |
| Suzhou Qizi Mountain Landfill Gas Recovery Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                                                                                                                             |  |
| <b>Organisation:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              | <b>Client:</b>                                                                                                              |  |
| SGS United Kingdom Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              | South Pole Carbon Asset Management Ltd.                                                                                     |  |
| <b>Publication of Monitoring Report:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                                                             |  |
| <b>Monitoring Period:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | 01/08/2010 to 31/12/2011                                                                                                    |  |
| First Monitoring Report Version and Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | Version 1, dated 15/02/2012                                                                                                 |  |
| Final Monitoring Report Version and Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | Version 6, dated 12/03/2013                                                                                                 |  |
| <b>Summary:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                                                             |  |
| <p>SGS United Kingdom Ltd has performed the third periodic verification of the GS project Suzhou Qizi Mountain Landfill Gas Recovery Project (GS registry Ref. No. GS397 &amp; SGS Ref. No. CCP.VOL0702 GS). The verification includes confirming the implementation of the revised monitoring plan dated 27/09/2009 and the application of the monitoring methodology as per ACM0001 Version 08 dated 30/11/2007. A site visit was conducted to verify the data submitted in the monitoring report. SGS confirms the following has been reviewed;</p> <ul style="list-style-type: none"> <li>(a) The registered PDD, revised monitoring plan, and the corresponding validation report;</li> <li>(b) Monitoring report, emission reduction spreadsheet, previous verification reports;</li> <li>(c) The applied monitoring methodology;</li> <li>(d) Relevant decisions, clarifications and guidance from the CMP and the Gold Standard Secretariat and CDM Executive Board/VCS Board.</li> <li>(e) All information and references relevant to the project activity's resulting in emission reductions</li> </ul> <p>The project is located at Qizi Mountain Landfill, Suzhou, Jiangsu Province, China. The project applies for Gold Standard VER. There are 3 units in the project site. Each unit has an installation capacity of 1.25 MW. The 4th Generator is still under plan in this monitoring period. During the first crediting period, the project is expected to collect 4,584.6 tonnes CH<sub>4</sub> per year on average. The exported electricity is estimated to be 23,963 MWh a year on average. The electricity generated will replace equivalent amount of electricity from East China Power Grid. The expected average annual emission reductions are 117,477 tCO<sub>2</sub>e during the first crediting period.</p> <p>SGS confirms that the project is implemented in accordance with the validated and registered Project Design Document. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the implementation of the project has resulted in <b>153,709 tCO<sub>2</sub>e</b> emission reductions during period 01/08/2010 up to 31/12/2011.</p> |              |                                                                                                                             |  |
| <b>Subject:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                                                             |  |
| Gold Standard Verification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                                                             |  |
| <b>Verification Team:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |                                                                                                                             |  |
| Yi Liao – Team leader/Lead Assessor/ TA 1.1 and TA 13.1 Expert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              | <input checked="" type="checkbox"/> No Distribution (without permission from the Client or responsible organisational unit) |  |
| Tracy Zheng – Assessor/Local Assessor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                                                                                                                             |  |
| <b>Technical Review:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              | <input type="checkbox"/> Limited Distribution                                                                               |  |
| Date: 18/03/2013<br>Name: Michael WU Shimin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                                                                                                                             |  |
| <b>Revision Number:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Date:</b> | <b>Number of Pages:</b>                                                                                                     |  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 08-01-2013   | 44                                                                                                                          |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 15-03-2013   | 55                                                                                                                          |  |

## Abbreviations

|                   |                                                                                       |
|-------------------|---------------------------------------------------------------------------------------|
| CAR               | Corrective Action Request                                                             |
| CDM               | Clean Development Mechanism                                                           |
| CL                | Clarification Request                                                                 |
| CO <sub>2</sub>   | Carbon Dioxide                                                                        |
| CO <sub>2</sub> e | Carbon Dioxide Equivalent                                                             |
| CMP               | Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol |
| DNA               | Designated National Authority                                                         |
| DOE               | Designated Operational Entity                                                         |
| EB                | Executive Board                                                                       |
| EF                | Emission Factor                                                                       |
| ERs               | Emission Reductions                                                                   |
| FAR               | Forward Action Request                                                                |
| GHG               | Greenhouse Gas(es)                                                                    |
| GS                | Gold Standard                                                                         |
| GS VER            | Gold Standard Voluntary Emission Reduction                                            |
| GS-VER-PDD        | Gold Standard Voluntary Emission Reduction Project Design Document                    |
| IPCC              | Intergovernmental Panel on Climate Change                                             |
| MP                | Monitoring Plan                                                                       |
| MR                | Monitoring Report                                                                     |
| MRRs              | Monthly Reading Records                                                               |
| LFG               | Landfill Gas                                                                          |
| PDD               | Project Design Document                                                               |
| PP                | Project Participant                                                                   |
| UNFCCC            | United Nations Framework Convention on Climate Change                                 |

## Table of Content

|                                                                                                                            |    |
|----------------------------------------------------------------------------------------------------------------------------|----|
| 1. Introduction.....                                                                                                       | 5  |
| 1.1 Objective.....                                                                                                         | 5  |
| 1.2 Scope .....                                                                                                            | 5  |
| 1.3 Project Activity and Period Covered.....                                                                               | 5  |
| 2. Methodology .....                                                                                                       | 6  |
| 2.1 General Approach .....                                                                                                 | 6  |
| 2.2 Verification Team for this Assessment .....                                                                            | 6  |
| 2.3 Means of Verification.....                                                                                             | 6  |
| 2.3.1 Review of Documentation .....                                                                                        | 6  |
| 2.3.2 Site Visits.....                                                                                                     | 7  |
| 2.4 Reporting of Findings .....                                                                                            | 7  |
| 2.5 Internal Quality Control.....                                                                                          | 8  |
| 3. Verification Findings.....                                                                                              | 9  |
| 3.1 Project Implementation - General .....                                                                                 | 9  |
| 3.2 Remaining Issues, CAR's, FAR's from Previous Validation or Verification.....                                           | 10 |
| 3.3 Completeness of Monitoring.....                                                                                        | 10 |
| 3.3.1 LFG <sub>electricity,y</sub> : Amount of landfill gas combusted in power plant at Normal Temperature and Pressure 10 |    |
| 3.3.2 W <sub>CH4</sub> : Methane fraction in the landfill gas .....                                                        | 11 |
| 3.3.3 T: Temperature of the landfill gas .....                                                                             | 13 |
| 3.3.4 P: Pressure of the landfill gas.....                                                                                 | 14 |
| 3.3.5 EL <sub>LFG</sub> : Net amount of electricity generated using LFG.....                                               | 16 |
| 3.3.6 EL <sub>generation</sub> : Electricity generation from the generator in the year y.....                              | 16 |
| 3.3.7 EL <sub>internal consumption</sub> : Electricity imported from the grid in the year y .....                          | 16 |
| 3.3.8 Operation of the energy plant .....                                                                                  | 17 |
| 3.3.9 Laws and regulations about waste management system in China.....                                                     | 17 |
| 3.3.10 Sustainable Development Indicator .....                                                                             | 18 |
| 3.4 Accuracy of Equipment.....                                                                                             | 20 |
| 3.5 Accuracy of Emission Reduction Calculations.....                                                                       | 20 |
| 3.6 Quality of Evidence to Determine Emission Reductions .....                                                             | 20 |
| 3.7 Management System and Quality Assurance.....                                                                           | 20 |
| 3.8 Data from External Sources.....                                                                                        | 20 |
| 4. Calculation of Emission Reductions.....                                                                                 | 21 |
| 5. Recommendations for Changes in the Monitoring Plan.....                                                                 | 23 |
| 6. Overview of Results .....                                                                                               | 24 |
| 7. Verification and Certification Statement .....                                                                          | 26 |
| 8. Document References .....                                                                                               | 28 |
| 9. Findings Overview .....                                                                                                 | 31 |
| 10. Statement of Competence.....                                                                                           | 45 |
| 11. Photographic Evidence .....                                                                                            | 50 |

## 1. Introduction

### 1.1 Objective

SGS United Kingdom Limited has been contracted by South Pole Carbon Asset Management Ltd. to perform an independent verification of its GS project Suzhou Qizi Mountain Landfill Gas Recovery Project. GS projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Certified Emission Reductions (CERs).

The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The emissions report conforms with the requirements of the revised monitoring plan and the approved methodology; and
- The data reported are complete and transparent.

### 1.2 Scope

The scope of the verification is the independent and objective review and ex post determination of the monitored reductions in GHG emission by the project activity. The verification is based on the validated and registered project design document and the monitoring report. The project is assessed against the requirements of the Gold Standard version 1 (/3/), Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance.

SGS has, based on the recommendations in the Gold Standard Requirement, Gold Standard Toolkit and the Validation and Verification Manual employed a risk-based approach in the verification, focusing on the identification of significant reporting risks and the reliability of project monitoring.

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

### 1.3 Project Activity and Period Covered

This engagement covers emissions and emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of the following project and period.

|                                          |                                                                                                                        |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Title of Project Activity:               | Suzhou Qizi Mountain Landfill Gas Recovery Project                                                                     |
| Gold Standard Registry Number:           | GS 397                                                                                                                 |
| Monitoring Period Covered in this Report | 01/08/2010 to 31/12/2011                                                                                               |
| Project Participants                     | Everbright Environment and Energy (Suzhou) Landfill Gas to Energy Co., Ltd.<br>South Pole Carbon Asset Management Ltd. |
| Location of the Project Activity:        | Qizi Mountain, Mudu County, Wuzhong District, Suzhou City, Jiangsu Province, People's Republic of China                |

This is the third periodic verification. Generator I and generator II started construction in November 2005, and operation on 01/01/2007, generator III started construction in August 2007, and operation in September 2008, and generator IV wasn't in construction at the time of the site visit on 28/02/2012 to 29/02/2012.

## 2. Methodology

### 2.1 General Approach

SGS' approach to the verification is a two-stage process.

In the first stage, SGS completed a strategic review and risk assessment of the projects activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

At the end of this stage, SGS produced a Periodic Verification Checklist which, based on the risk assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan. The strategic review and risk assessment and verification of parameters is undertaken by means of a combined verification protocol.

Using the Verification protocol, SGS verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a site visit and a desk review of the monitoring report. This verification report describes the findings of this assessment.

### 2.2 Verification Team for this Assessment

| Name             | Role                                                                |
|------------------|---------------------------------------------------------------------|
| Yi LIAO          | Lead Assessor / Team Leader/Sectoral Scope Expert (TA13.1 & TA 1.1) |
| Tracy ZHENG Ying | Assessor/Local Assessor                                             |

| Technical Review Team |                                 |
|-----------------------|---------------------------------|
| Name                  | Role                            |
| Michael WU Shimin     | Technical Reviewer              |
| Shute LI Shude        | Sectoral Scope Expert (TA 13.1) |
| Jumson Fu Qiang       | Sectoral Scope Expert (TA 1.1)  |

### 2.3 Means of Verification

#### 2.3.1 Review of Documentation

The validated PDD, Revised Monitoring Plan and the monitoring report submitted by the client and additional background documents related to the project performance were reviewed. A complete list of all documents reviewed is attached in section 8 of this report.

### 2.3.2 Site Visits

As part of the verification, the following on-site inspections have been performed by all members of the assessment team.

|                                                                                                                                                                                     |                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Location:</b> Qizi Mountain, Mudu County, Wuzhong District, Suzhou City, Jiangsu Province, People's Republic of China                                                            |                                                                                                         |
| <b>Date:</b> 28/02/2012 to 29/02/2012.                                                                                                                                              |                                                                                                         |
| <b>Coverage:</b>                                                                                                                                                                    | <b>Source of Information / Persons Interviewed</b>                                                      |
| 1. Assessment of the implementation and operation of the project activity as per the registered PDD;                                                                                | Mr. Lin Yi, project manager, South Pole Carbon Asset Management Ltd.                                    |
| 2. Review of information flows for generating, aggregating and reporting the monitoring parameters;                                                                                 | Mr. Justin Qu, project manager, South Pole Carbon Asset Management Ltd.                                 |
| 3. Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the revised monitoring plan.                | Ms. Ao Sun, project manager, Everbright Environment (Beijing).                                          |
| 4. A cross-check between information provided in the monitoring report and data from other sources such as MRRs, DRRs and sales receipts;                                           | Mr. Liu Zhaofeng, engineer Everbright Environment and Energy (Suzhou) Landfill Gas to Energy Co., Ltd.  |
| 5. A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PDD and the selected methodology; | Mr. Wang Shiyong, engineer, Everbright Environment and Energy (Suzhou) Landfill Gas to Energy Co., Ltd. |
| 6. Review of calculations and assumptions made in determining the GHG data and emission reductions;                                                                                 | Mr. Zhao Hongjie, engineer, Everbright Environment and Energy (Suzhou) Landfill Gas to Energy Co., Ltd. |
| 7. Identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters     |                                                                                                         |
| 8. Interview the local stakeholders with regard to the project's impacts on sustainability                                                                                          |                                                                                                         |

### 2.4 Reporting of Findings

As an outcome of the verification process, the team can raise different types of findings

In general, where insufficient or inaccurate information is available and clarification or new information is required the team shall raise a Clarification Request (CL) specifying what additional information is required.

Where a non-conformance arises the team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- I. Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;

- II. Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;
- III. Issues identified in a FAR during validation to be verified during verification have not been resolved by the project participants.

The verification process may be halted until this information has been made available to comply with the Gold Standard requirements or the requirements of the CDM Executive Board/VCS Board. Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

A clarification request (CL) will be raised if information is insufficient or not clear enough to determine whether the applicable Gold Standard and CDM/VCS requirements have been met. All CARs and CLs raised during verification shall be resolved prior to submitting a request for issuance.

Corrective Action Requests and Clarification requests are raised in the Periodic Verification Checklist. The Project Developer is given the opportunity to “close” outstanding CARs and respond to CLs and Observations.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period. Observations may be raised which are for the benefit of future projects and future verification actors. These have no impact upon the completion of the verification activity.

All CARs, CLs and FARs for this verification period are included in this report.

## **2.5 Internal Quality Control**

Following the completion of the assessment process and a recommendation by the Assessment Team, all documentation will be forwarded to a Technical Reviewer. The task of the Technical Reviewer is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team.

### 3. Verification Findings

#### 3.1 Project Implementation - General

The project was implemented and equipment installed as described in the registered PDD;

Based on the project information available on the GS website, [http://mer.markit.com/br-reg/public/project.jsp?project\\_id=103000000002519](http://mer.markit.com/br-reg/public/project.jsp?project_id=103000000002519) (/5/), the project was registered with GS registry on 22/04/2009 with the first crediting period for the project from 22/04/2007 to 21/04/2014. This is the third GS-VER periodic verification for the project covering the period from 01/08/2010 to 31/12/2011. The start date of this monitoring period is after the end date of the last monitoring period. And the end date of this monitoring period is within the first crediting period.

The project was registered against ACM0001 Version 08 dated 30/11/2007 (/1/). The last subsection version of ACM0001 Version 08 was updated to the version08.1; the nature of revision is "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" replaces the withdrawn "Tool to calculate project emissions from electricity consumption". This has no impact the project as this Tool to calculate baseline, project and/or leakage emissions from electricity consumption is related to the calculation of  $PE_{EC,y}$  which is not related to this project. Therefore, it is still applicable to apply the ACM0001 version 08 to this project. A revision of monitoring plan (/19/) has been approved by GS registry on 07/01/2010 (/20/). The monitoring methodology has been correctly applied and the documents for this periodic verification are complete and transparent.

During the site visit, no changes were observed on the physical and spatial configuration of the project. Up to this monitoring period, the project boundary is consistent with the registered GS-VER-PDD (/2/). Management and operational system is in place. QA/QC procedures stipulated in the registered GS-VER-PDD have been followed.

**CL #1** was raised according to Para. 10 (a) (i) of "Guidelines on completeness check of requests for issuance" (EB48, Annex 68) the implementation status of the project during the monitoring period under consideration shall be contained in the monitoring report. The PP was requested to add the information regarding the actual operation of the project activity during this monitoring period in the monitoring report, especially information on special events, for example overhaul times, downtimes of equipment, exchange of equipment, emergency process etc. and events or situations that occurred during the monitoring period, which may impact the applicability of the methodology and how the issues resulting from these events or situations are being addressed. The information regarding the actual operation of the project activity during this monitoring period has revised accordingly in the section 3 of the MR version 3. The assessment team has verified and confirmed the downtimes of Generator I was from 02/08/2010 to 05/08/2010 and from 25/11/2011 to 31/12/2011; the downtimes of Generator III was from 08/10/2011 to 15/10/2011. Generator II was operated continuously. There is no other special event besides downtimes of generators and replacement of the monitoring meters. The reported information is consistent with the daily book in the specific period. **CL #1** is closed out.

The emission reduction was 184,615 tCO<sub>2</sub>e (53,125 tCO<sub>2</sub> which from 01/08/2010 to 31/12/2010 + 131,490 tCO<sub>2</sub> which from 01/01/2011 to 31/12/2011) for the period 01/08/2010 to 31/12/2011 as per the estimation made in the registered PDD. The actual emission reduction has been verified as 153,709 tCO<sub>2</sub>e for the period 01/08/2010 to 31/12/2011, which was 16.7% lower than the estimated emission reduction for the same period as to the approved revised monitoring plan. **CL #9** is raised according to the "Guidelines on completeness check of request for issuance (Annex 68, EB48) Para. 10 a (viii), monitoring report shall contains comparison of the actual emission reduction achieved in the monitoring period with the estimated value in the registered PDD for the same period and the reasons for significant increasing or decreasing. In response to this finding, the PP clarified that in the period from 01/08/2010 to 31/12/2010, the actual ER was lower than PDD estimation by 11.4%, the decrease due to the conservative max error being applied. In addition, there are 22 days, out of 153 days, are lack of accurate data for ER by methane. This means 14.38% days of the ER by methane was not counted accordingly. From 01/01/2011 to 31/12/2011, the actual ER lower than the PDD estimation 18.9%, the decrease due to the conservative max error was applied. In addition, there are 47 days, out of 365 days, are lack of accurate data for the ER by methane. This means

12.88% days of ER by methane was not counted accordingly. The assessment team verified the reason of the decrease presented in the MR version 3 was consistent the verified onsite, in particular the monitoring equipment max error applied for conservative concerning, the operation hour decrease, the explaining was consistent with the actual activity, it can be deemed as reasonable and acceptable. **CL #9** is closed out.

**CAR #11** is raised during the completeness check for the incorrect statement about the monitoring period on MR page 14, the incorrect serial number of the methane analyzer, the incorrect lower and higher bound of W table, the incorrect report value of  $EL_{LFG}$  for 01/01/2011 - 31/07/2011; the PP is required to make a correction to the inconsistent information. The assessment team has verified the revised MR Version 5, dated 27/02/2013 and the ER spreadsheet dated 27/02/2013, the inconsistent information has been revised accordingly, **CAR #11** is closed out. Details as

1. The monitoring period has been revised 01/08/2010 to 31/12/2011 in page 14.
2. The serial number of the methane analyzer for WCH4 has been revised to GM08018 in page 7.
3. The lower and higher bound of W has added for the period from 01/01/2011 to 31/12/2011 in page 24.
4. The value of  $EL_{LFG}$  for 01/01/2011 - 31/07/2011 has been corrected to 13,237 in page 25 of the MR;
5. The value of  $EL_{LFG}$  for this monitoring period has been corrected to 32,402 in page 32 of the MR;

No fossil fuel consumption equipment for power generation was found for the project during the onsite visit.

### **3.2 Remaining Issues, CAR's, FAR's from Previous Validation or Verification**

This is the third periodic verification for the project. There are no remaining issues from previous validation and/or verification (/4/).

### **3.3 Completeness of Monitoring**

The monitoring of reductions in GHG emissions achieved by the registered project has been implemented in accordance with the approved revised monitoring plan. The monitoring mechanism is effective and reliable. All applicable parameters stated in the approved revised monitoring plan, the applied methodology and relevant GS standard requirements have been sufficiently monitored. In accordance with paragraph 234 of the VVS version 03.0 (/21/), SGS confirms that responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the approved revised monitoring plan. The parameters and the monitoring approach discussed in the monitoring report are verified to be in compliance with that stated in the approved revised monitoring plan.

#### **3.3.1 $LFG_{electricity,y}$ : Amount of landfill gas combusted in power plant at Normal Temperature and Pressure**

As per the approved revised monitoring plan,  $LFG_{electricity,y}$  is the amount of landfill gas combusted in power plant at normal temperature and pressure.  $LFG_{electricity,y}$  is continuously measured by the flow meter. Data are aggregated monthly and yearly for each power plant. The flow meters are subject to a regular maintenance and testing regime to ensure accuracy.

During the onsite visit, it has been found that for this project there are two landfill gas combusted systems, and there are two flow meters connecting the two landfill gas combusted units respectively. The 1<sup>st</sup> phase landfill gas combusted system (Line 1) includes the generator I and generator II, which has been commercially implemented since 01/01/2007. And the 2<sup>nd</sup> phase landfill gas combusted system (Line 2) includes the generator III and generator IV, and the generator III has been commercially implemented since September, 2008. The generator IV does not start construction till the onsite visit. There is no any other treatment of landfill gas besides electricity generation. Therefore all the collected landfill gas has been used for electricity generation.

The flow meters are well installed at the LFG pipelines to continuously measure the  $LFG_{electricity,y}$  and were checked and confirmed during the site visit by the assessment team. The real-time values of  $LFG_{electricity,y}$ , temperature and pressure (as presented in sections 3.3.3 and 3.3.4 of this report) were read hourly and

manually recorded in the operation log (/12/), spreadsheet is used to convert results into normalized cubic meters at standard temperature and pressure (0 degree Celsius and 1,013 bar).

The flow meters (F1 and F2) were calibrated annually by the officially accredited entity as per the national regulations JJG882-2004 and JJG198-1994. Calibration certificates of the flow meters and accreditation certificate (/11/) of the entity have been provided for verification at site, no errors were identified in these calibrations. Details are as follows:

| Equipment  | S/N                            | Calibration Date | Accuracy level | Frequency | Calibration Entity                                                                                                                             |
|------------|--------------------------------|------------------|----------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Flow meter | F1:<br>Serial No.:<br>01965563 | 30/07/2010       | 0.5            | Annually  | Suzhou Institute of Measurement and Testing Technology (The SN of Authorization Certificate: - (SU) Faji (2008) 1005, Valid until 29/06/2013.) |
|            |                                | 27/05/2011       |                |           |                                                                                                                                                |
|            | F2:<br>FD21246A                | 29/06/2010       | 0.5            |           |                                                                                                                                                |
|            |                                | 26/05/2011       |                |           |                                                                                                                                                |

The flow meter F1 (S/N: 01965563) and F2 (S/N: FD21246A) were sent to the calibration entity for calibration from 24/05/2011 to 28/05/2011. The parameter amount of landfill gas combusted in power plant at standard temperature and pressure for this period cannot be monitored. The monitored values of LFG<sub>electricity</sub>, temperature and pressure were directly recorded once per hour, then convert results into normalized cubic meters at standard temperature and pressure (0 degree Celsius and 1,013 Pa) by calculation.

The temperature meter new T1 (S/N: 05-03) and new T3 (S/N: 05-04) were sent to the calibration entity for calibration from 28/04/2011 to 09/05/2011. The temperature meter new T2 (S/N: 1107301) and new T4 (S/N: 1107307) were sent to the calibration entity for calibration from 11/07/2011 to 19/07/2011. The real-time temperature of the landfill gas for this period is used to calculate the amount of landfill gas combusted in power plant at standard temperature and pressure.

The pressure meter P2 (S/N: 10.3.2.254) and P4 (S/N: 10.3.2.267) were sent to the calibration entity for calibration during 19/10/2010 - 02/11/2010, 15/03/2011 – 23/03/2011, 09/09/2011 – 16/09/2011. The pressure meter P1 (S/N: 09.4.13.163) and P3 (S/N: 09.4.13.158) were sent to the calibration entity for calibration during 11/09/2010 - 17/09/2010, 15/03/2011 – 23/03/2011, 09/09/2011 – 16/09/2011. The real-time pressure of the landfill gas for the above mentioned in this periods is used to calculate the amount of landfill gas combusted in power plant at standard temperature and pressure.

According to the approved revised monitoring plan, “when the meter operates abnormally during a month or any other unexpected problems occur, the amount of LFG generated shall not be counted.” **CAR #6** was raised to ask the PP to make relevant revision in this regard. The assessment team has verified the adjustment of ER spreadsheet (/7/) for the period of F1, F2, T1, T2, P1, P2 sent to calibration, and confirmed the data during the meters sent to calibration was not adopted for the conservative and the ER calculation is correct. **CAR #6** is closed out.

It is verified that the reported amount of landfill gas combusted in power plant at normal temperature and pressure is consistent with the raw data (/14/). The ER calculation spreadsheet has been checked and it is verified that the value of LFG<sub>electricity</sub> in the spreadsheet was complete and accurate and the calculation was in compliance with the approved revised monitoring plan and the methodology applied.

### 3.3.2 *W<sub>CH4</sub>: Methane fraction in the landfill gas*

As per the approved revised monitoring plan, the methane fraction in the landfill gas is measured hourly by a portable equipment with the accuracy level of 0.5%.

During the onsite visit, it was found that methane fraction has been measured hourly by a portable methane analyzer (Type: GEM 2000). Data is recorded in operation log, and transferred manually into the spreadsheet formed to methane quantity.

EB 48 Annex 13 “Guidelines to calculate the fraction of methane in the landfill gas from periodical measurements” (/22/) is followed and lower bound of the 95% confidence interval was used for fraction of methane in the landfill gas during this period.

The calculation result is as follows:

|         | Period                | Lower bound of the 95% confidence interval for $W_{CH_4}$ | Higher bound of the 95% confidence interval for $W_{CH_4}$ |
|---------|-----------------------|-----------------------------------------------------------|------------------------------------------------------------|
| Phase 1 | 01/08/2010-31/12/2010 | 48.25%                                                    | 48.26%                                                     |
|         | 01/01/2011-31/12/2011 | 55.48%                                                    | 55.49%                                                     |
| Phase 2 | 01/08/2010-31/12/2010 | 48.79%                                                    | 48.80%                                                     |
|         | 01/01/2011-31/12/2011 | 55.72%                                                    | 55.74%                                                     |

The lower bound of the 95% confidence interval obtained from the period from 01/08/2010 to 31/12/2011 has been used to estimate the baseline methane emissions. The assessment team verified the input value in calculation of 95% confidence interval for  $W_{CH_4}$  is consistent with the raw daily log (/14/) and confirmed the calculation process is correct. The low value was adopted for the ERs calculation as a conservative approach. The  $W_{CH_4}$  was used to calculate the ERs from the Methane Avoidance as below process:

$$ER_{CH_4} = \frac{LFG_{electricity,y} \times W_{CH_4} \times P_1 \times T_0 \times \rho_0 \times GWP_{CH_4}}{P_0 \times T_1}$$

|                       |                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------|
| $ER_{CH_4}$           | = Emission reduction from methane avoidance, t                                             |
| $LFG_{electricity,y}$ | = Amount of landfill gas combusted in power plant, m <sup>3</sup>                          |
| $W_{CH_4}$            | = Methane fraction in the landfill gas, m <sup>3</sup> CH <sub>4</sub> /m <sup>3</sup> LFG |
| $P_1$                 | = Pressure of landfill gas, kPa                                                            |
| $T_0$                 | = Temperature under standard condition, 0 degree Celsius                                   |
| $\rho_0$              | = Density of methane under standard condition, 0.0007168t/m <sup>3</sup>                   |
| $GWP_{CH_4}$          | = Global warming potential of methane, 21 tCO <sub>2</sub> e/tCH <sub>4</sub>              |
| $P_0$                 | = Pressure under standard condition, 101.3 kPa                                             |
| $T_1$                 | = Temperature of landfill gas, degree Celsius                                              |

The portable methane analyzer is calibrated annually by the officially accredited entity as per national regulation JJG 693-2004. Calibration certificates and accreditation certificate of the entity have been provided to the assessment team, no errors were identified in these calibrations. Details are verified as follows:

| Equipment        | S/N     | Calibration Date | Accuracy level | Frequency | Calibration Entity                                                                                                                             |
|------------------|---------|------------------|----------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| methane analyzer | GM08018 | 16/06/2010       | 0.5            | Annually  | Suzhou Institute of Measurement and Testing Technology (The SN of Authorization Certificate: - (SU) Faji (2008) 1005, Valid until 29/06/2013.) |
|                  |         | 24/05/2011       |                |           |                                                                                                                                                |

During the onsite visit, it was found that the parameter  $W_{CH_4}$  is measured hourly by a portable equipment. It is required to clarify how the EB48 Annex13 “Guidelines to calculate the fraction of methane in the landfill gas from periodical measurements” and the revised monitoring plan are followed during the emission reductions calculation process. And the serial number of portable gas analyzer W indicated in the monitoring report version 1 (/6/) is inconsistent with the verified result. It is required to clarify and make relevant correction if necessary. In addition, through on site visit, the assessment team found that the old portable gas analyzer was out of order since 28/12/2011 and had not been replaced by the new portable gas analyzer until 03/01/2012. **CAR #3** was raised in this regard. The PP adjusted the emission reductions claimed during this period according to the approved revised monitoring plan. The assessment team checked the updated the ER spreadsheet and found the revision input values of measured  $W_{CH_4}$  for calculating lower bound of 95% confidence interval  $CH_4$  fraction are consistent with the verified result. The assessment team checked the MR version 3 and found the serial number of analyzer W indicated in the MR version3 is revised and consistent with the verified result. **CAR #3** is closed out

### **3.3.3 T: Temperature of the landfill gas**

This parameter is measured by temperature meters, which is used to the gas standardized as mentioned in section 3.3.1.

As per the approved revised monitoring plan, the temperature of the landfill gas is continuously measured and read hourly by well-trained operators, then the data are recorded in the operation log and archived in the spreadsheet. The temperature meters T1 and T2 are installed for the 1<sup>st</sup> phase landfill gas combusted system (Line 1), and the temperature meters T3 and T4 are installed for the 2<sup>nd</sup> phase landfill gas combusted system (Line 2) respectively. For each phase, the monitored the temperature was cross-checked by the two meters and recorded the conservative value, if one meter is not validity, the staff will adopt the data from another meter. The temperature meters and relevant pipelines were checked visually on site.

Through the document review, the assessment team found that the calibration of the thermometer T1, T2, T3 and T4 had been delayed and cannot cover the whole monitoring period from 01/08/2010 to 31/12/2011.

For T1 and T3, the period from 22/04/2011 to 09/05/2011 is not covered and the calibration is delayed as per the frequency specified in JJG226-2001 – Verification Regulation of Bimetallic Thermometers issued by General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China.

For T2 and T4, the period from 22/04/2011 to 19/07/2011 is not covered and the calibration is delayed as per the frequency specified in JJG226-2001 – Verification Regulation of Bimetallic Thermometers issued by General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China.

In addition, the calibration reports of old T2 (S/N: 4) and new T2 (S/N: 1107301) dated 22/04/2010 and 14/07/2011 respectively all showed that the error (2% applied for old T2 S/N: 4 and 2.5% applied for new T2 S/N: 1107301) identified in the calibration tests beyond the maximum permissible error (1.5%) of the monitoring equipments.

The calibration report of old T3 (S/N: 1) dated 22/04/2010 showed that the error (4%) identified in the calibration test beyond the maximum permissible error (1.5%) of the old T3.

The calibration report of new T4 (S/N: 1107307) dated 14/07/2011 showed that the error (4.2%) identified in the calibration test beyond the maximum permissible error (1.5%) of the new T4 and the new T4 was unqualified.

In addition, the assessment team found that the calibration date of new T4 reported in the monitoring report version 1 is inconsistent with the verified result.

**CAR #4** is raised to the PP clarify how the “Guidelines for assessing compliance with the calibration frequency requirements” are followed when calculating the emission reductions, and report the correct calibration date of new T4, and report the dismantlement information of the old T1, T2, T3 T4 and the installation information of the new T1, T2, T3 and T4. And adjust the emission reductions calculation if necessary.

For response to CAR#4, the PP applied old T2 error 2% as the most conservative error for Temperature of phase I until 18/07/2011. Apply new T2 error 2.5% as the most conservative error for Temperature of phase I from 19/07/2011. Apply old T3 error 4% as the most conservative error for Temperature of phase II until 08/05/2011. Apply old T4 error 1.5% as the most conservative error for Temperature of phase II from 09/05/2011 to 2011/07/18. Apply new T4 error 4.2% as the most conservative error for Temperature of phase II from 19/07/2011. As the temperature meter validity is 1 year, the calibration of the old T1, old T2, old T3 and old T4 are due on 21/04/2011, there is still a period in use before it is replaced. Thus, it is defined as a delay. It is verified the old T1 was with the validity from 22/04/2010 – 21/04/2011, new T1 was valid from 05/05/2011 – 04/05/2012, the replacement was on 09/05/2011. The old T2 was with the validity from 22/04/2010 – 21/04/2011, new T2 was valid from 14/07/2011 – 13/07/2012, the replacement was on 19/07/2011. The old was T3 with the validity from 22/04/2010 – 21/04/2011, new T3 was valid from 05/05/2011 – 04/05/2012, the replacement was on 09/05/2011. The old T4 was with the validity from 22/04/2010 – 21/04/2011, new T3 was valid from 14/07/2011 – 13/07/2012, the replacement was on 19/07/2011. The T1 and T2 installed on phase I, monitored the temperature as cross-check for each other, if one meter is not valid, the staff will read the data from another one. The delay calibration period for phase I can deem as from 21/04/2011 to 09/05/2011. The T3 and T4 installed on phase II monitored the temperature as cross-check for each other, if one meter is not valid, the staff will read the data from another one. The delay calibration period for phase II is from 21/04/2011 to 09/05/2011. For the delay calibration period, the ER by Methane from 21/04/2011 to 09/05/2011 has been not taken in account in order to be conservative. The updated MR report the meter of T1 was replaced on 09/05/2011. The meter of T2 was replaced on 19/07/2011. The meter of T3 was replaced on 09/05/2011. The meter of T4 was replaced on 19/07/2011. The assessment team verified and confirmed the emission reduction adjustment in the MR version 6, the ER version 6 is correct and conservative. The T1, T2, T3 and T4 calibration and dismantlement information reported is verified and confirmed by the assessment team. Thus, **CAR#4** is closed out.

Detailed calibration information is verified as follows:

| Equipment | S/N     | Calibration Date | Accuracy level | Frequency | Calibration Entity                                                                                                                             |
|-----------|---------|------------------|----------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Old T1    | 3       | 22/04/2010       | 1.5            | Annually  | Suzhou Institute of Measurement and Testing Technology (The SN of Authorization Certificate: - (SU) Faji (2008) 1005, Valid until 29/06/2013.) |
| New T1    | 05-03   | 05/05/2011       | 1.5            | Annually  |                                                                                                                                                |
| Old T2    | 4       | 22/04/2010       | 2.0            | Annually  |                                                                                                                                                |
| New T2    | 1107301 | 14/07/2011       | 2.5            | Annually  |                                                                                                                                                |
| Old T3    | 1       | 22/04/2010       | 4.0            | Annually  |                                                                                                                                                |
| New T3    | 05-04   | 05/05/2011       | 1.5            | Annually  |                                                                                                                                                |
| Old T4    | 2       | 22/04/2010       | 1.5            | Annually  |                                                                                                                                                |
| New T4    | 1107307 | 14/07/2011       | 1.5            | Annually  |                                                                                                                                                |

The reported data of amount of landfill gas combusted in power plant at standard temperature and pressure and the electricity generated using the landfill gas in August, September and October, 2010 and January, February, March, April, May, June, July and October, 2011 are inconsistent with the verified result of the assessment team, **CAR #2** is raised to the PP make relevant correction in this regard. The assessment team checked the updated ER spreadsheet version 3, dated 25/05/2012 provided and verified the reported data are correct. **CAR #2** is closed out.

The reported data in the ER spreadsheet version 5 for this monitoring period was verified against the data in the raw operation log. Consistency is found with each other.

### 3.3.4 P: Pressure of the landfill gas

This parameter is measured by pressure meters, which is used to the gas standardized as mentioned in section 3.3.1.

As per the approved revised monitoring plan, the pressure of the landfill gas is continuously measured and read hourly by well-trained operators, then the data are recorded in the operation log and archived in the

spreadsheet. The pressure meters P1 and P2 are installed for the 1<sup>st</sup> phase landfill gas combusted system (Line 1), and the pressure meters P3 and P4 are installed for the 2<sup>nd</sup> phase landfill gas combusted system (Line 2) respectively. The pressure meters and relevant pipelines were checked visually on site.

Through document review, the assessment team found that the calibration of the thermometer P1 and P3 had been delayed and cannot cover the whole monitoring period from 01/08/2010 to 31/12/2011. For P1 and P3, both the period from 14/09/2010 to 15/09/2010 and the period from 16/03/2011 to 17/03/2011 are not covered; the calibration is delayed as per the frequency specified in JJG573-2003 - Verification regulation of diaphragm pressure gauge issued by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China. The calibration date of P3 reported in the Monitoring Report version 1 is found inconsistent with the verified result.

**CAR #5** is raised to the PP shall clarify how the "Guidelines for assessing compliance with the calibration frequency requirements" (/23/) are followed when calculating the emission reductions, and report the correct calibration date of P3. For response this finding, the PP applied 2.5% as the most conservative error pressure of phase I and II for both during period from 14/09/2010 to 15/09/2010 and the period from 16/03/2011 to 17/03/2011. However refer to CAR#6, the pressure meter P1 (S/N: 09.4.13.163) and P3 (S/N: 09.4.13.158) were sent to the calibration entity for calibration during 11/09/2010 - 17/09/2010, 15/03/2011 – 23/03/2011, 09/09/2011 – 16/09/2011. The parameter temperature of the landfill gas for the above mentioned periods cannot be monitored, the data of has been deleted in the end. The assessment team has verified the adjustment of the ER spreadsheet for the P1 and P3 delay period, and confirmed the data was adopted for the conservative and the ER calculation is correct. **CAR #5** is closed out.

All the pressure meters are calibrated every six months by the officially accredited as per national standard JJG573-2003. Calibration certificates and accreditation certificate of the entity have been provided for verification at site, no errors were identified in these calibrations.

Detailed calibration information is verified as follows:

| Equipment | S/N         | Calibration Date                                     | Accuracy level | Frequency        | Calibration Entity                                                                                                                             |
|-----------|-------------|------------------------------------------------------|----------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| P1        | 09.4.13.163 | 14/03/2010<br>16/09/2010<br>18/03/2011<br>13/09/2011 | 2.5            | every six months | Suzhou Institute of Measurement and Testing Technology (The SN of Authorization Certificate: - (SU) Faji (2008) 1005, Valid until 29/06/2013.) |
| P2        | 10.3.2.254  | 25/04/2010<br>23/10/2010<br>18/03/2011<br>13/09/2011 | 2.5            | every six months |                                                                                                                                                |
| P3        | 09.4.13.158 | 14/03/2010<br>16/09/2010<br>18/03/2011<br>13/09/2011 | 2.5            | every six months |                                                                                                                                                |
| P4        | 10.3.2.267  | 25/04/2010<br>23/10/2010<br>18/03/2011<br>13/09/2011 | 2.5            | every six months |                                                                                                                                                |

Refer to CAR #2 regarding the reported data in the updated ER spreadsheet for this monitoring period was verified against the data in the raw operation log. Consistency is found with each other.

### 3.3.5 $EL_{LFG}$ : Net amount of electricity generated using LFG

As per the approved revised monitoring plan and the approved clarification (/25/),  $EL_{LFG}$  is the net amount of electricity generated using LFG.  $EL_{LFG}$  (Net amount of electricity generated using LFG) is calculated by  $EL_{generation}$  minus  $EL_{internal\ consumption}$ .  $EL_{generation}$  is the electricity generation from the generator, and  $EL_{internal\ consumption}$  is electricity imported from the grid. The parameters  $EL_{generation}$  and  $EL_{internal\ consumption}$  are continuously measured and monthly recorded. For details, please refer to parameter  $EL_{generation}$  and  $EL_{internal\ consumption}$ .

### 3.3.6 $EL_{generation}$ : Electricity generation from the generator in the year y

According to the approved revised monitoring plan, the parameter  $EL_{generation}$  is continuously measured and monthly recorded.

This is the third periodic verification. Generator I and generator II started construction in November 2005, and operation on 01/01/2007, generator III started construction in August 2007, and operation in September 2008, and generator IV has not started construction till the date of this onsite. Electricity generation from the generator ( $EL_{generation}$ ) were continuously measured by three electricity meters M1, M2 and M3 connecting to generator I, II and III respectively at the project site. The meters M1, M2 and M3 are with accuracy class of 0.5S. The project owner read the meter readings (M1, M2 and M3) every day and recorded the readings in the log book.

As per the revised monitoring plan, M1, M2 and M3 have been calibrated in compliance with the Chinese national Standard JJG307-2006. The calibration certificates (/9/) for M1, M2 and M3 and accreditation certificate of the calibrator (/10/) were provided to the verification team. It was verified that the three meters have been calibrated by qualified third party and were within the accuracy level in this monitoring period.

Verified calibration reports of meters M1, M2 and M3 are as follows:

| Meter              | M1                                                                                                                                                   | M2                                     | M3                                     |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|
| S/N                | 100791967                                                                                                                                            | 100791936                              | 101997920                              |
| Accuracy Level     | 0.5S                                                                                                                                                 | 0.5S                                   | 0.5S                                   |
| Calibration date   | 11/08/2009<br>10/08/2010<br>02/06/2011                                                                                                               | 11/08/2009<br>10/08/2010<br>02/06/2011 | 11/08/2009<br>10/08/2010<br>02/06/2011 |
| Calibration Entity | Suzhou Power Supply Measurement Management Centre<br>The SN of Authorization Certificate: -(2009) Sheng, Liang-biao, 354<br>Valid until 13/01/2013.. |                                        |                                        |

The readings of meters M1, M2, and M3 are measured continuously and recorded into Daily Reading Records (DRRs) (/14/) on a daily basis. Aggregated data are transcribed into Monthly Reading Records (MRRs) on a monthly basis.

Data of electricity generation from the generator in the MRRs were used to calculate the net amount of electricity generated using LFG. Data in the Daily Reading Records and Monthly Reading Records (/14/) were randomly checked for assurance. Refer to CAR #2 regarding the that reported amount of  $EL_{generation}$  in the MR is verified consistent with the data in MRRs. The ER calculation spreadsheet has been checked and it is verified that the value of  $EL_{generation}$  in the spreadsheet was complete and accurate and the calculation was in compliance with the registered PDD and the methodology applied.

### 3.3.7 $EL_{internal\ consumption}$ : Electricity imported from the grid in the year y

As per the approved revised monitoring plan (/20/) and the approved clarification (/24/),  $EL_{internal\ consumption}$  is continuously measured and monthly recorded.

The electricity imported from the grid ( $EL_{internal\ consumption}$ ) is continuously measured by two electricity meters M5 and M6 installed at two internal auxiliary electricity substations respectively at the project site. The meters M5 and M6 are with accuracy class of 2. The project owner read the meter readings (M5 and M6) every day and recorded the readings in the log book.

The calibration certificates (/9/) for M5 and M6 and accreditation certificate of the calibrator were provided to and verified by the verification team. It was verified that the two meters have been calibrated by qualified third party and were within the accuracy level in this monitoring period.

Verified calibration reports of meters M5 and M6 are as follows:

| Meter                 | M5                                                                                                                                             | M6                       |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| S/N                   | 2355946                                                                                                                                        | 2008-0577129             |
| Accuracy Level        | 2                                                                                                                                              | 2                        |
| Calibration date      | 04/06/2010<br>02/06/2011                                                                                                                       | 04/06/2010<br>02/06/2011 |
| Calibration Institute | Suzhou Institute of Measurement and Testing Technology (The SN of Authorization Certificate: - (SU) Faji (2008) 1005, Valid until 29/06/2013.) |                          |

The readings of meters M5 and M6 are measured continuously and recorded into Daily Reading Records (DRRs) on a daily basis. Aggregated data are transcribed into Monthly Reading Records (MRRs) on a monthly basis.

Data of electricity imported from the grid in the MRRs were used to calculate the net amount of electricity generated using LFG. Data in the daily operation logbooks were randomly checked for assurance. It is verified that reported amount of EL<sub>internal consumption</sub> in the MR is consistent with the data in MRRs. The ER calculation spreadsheet has been checked and it is verified that the value of EL<sub>internal consumption</sub> in the spreadsheet was complete and accurate and the calculation was in compliance with the registered PDD and the methodology applied.

### 3.3.8 Operation of the energy plant

The parameter is measured by an automatic counter as an inherent component (TEM EVO System) of the power generator. When the generator fails down, the counter stops counting automatically. Site operator takes the cumulative value of the counter, which is monitored to ensure methane destruction claimed for methane is used in electricity plant when it is operational.

During the onsite visit, it has been found that the TEM EVO System operates well. No calibration is needed for the inherent component system. The data recorded in the daily operation logbook taken by designated personnel of the project are used for cross check.

**CAR #7** is raised for the operation hours of the energy plant reported in the Monitoring Report version 1 is inconsistent with the verified result by the assessment team. The PP corrected the monitoring report in this regard.

The reported value in the revised Monitoring Report version 3 and revised spreadsheet were verified and found consistent with the data in the operation logbook. **CAR #7** is closed out.

Operational hours of the energy plant are as following:

|                       | Unit | 2010<br>(01/08/2010-<br>31/12/2010) | 2011<br>(01/01/2011-<br>31/07/2011) | 2011<br>(01/08/2011-<br>31/12/2011) | 01/08/2010-<br>31/12/2011 |
|-----------------------|------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------|
| Generator I (#3)      | h    | 3,585                               | 4,950                               | 2,714                               | 11,249                    |
| Generator II (#4)     | h    | 3,665                               | 4,980                               | 3,649                               | 12,294                    |
| Generator III<br>(#5) | h    | 3,671                               | 4,918                               | 3,386                               | 11,975                    |

### 3.3.9 Laws and regulations about waste management system in China

As per the approved revised monitoring plan, relevant laws and regulations about solid waste management system in China has been monitored yearly. When there are relevant changes, the baseline scenario or monitor plan will change accordingly.

According to ACM0001 version 08 and the approved revised monitoring plan, this parameter is required for any changes to the adjustment factor (AF) or MD<sub>reg,y</sub>. Relevant laws and regulations about solid waste management system in China is monitored yearly by the project participants. When there are relevant changes, the baseline scenario or monitor plan will change accordingly.

As per page A-52 of the validation report issued by TUV NORD dated 16/03/2009 (/4/), It is demonstrated that despite attempts to mandate the flaring and treatment of landfill gas, they are not widely enforced and the common practice in China remains venting LFG. During this monitoring period, there is no change about the environment regulation was found to enforce the project owner to treat the landfill gas. MD<sub>reg,y</sub> remains 0 and the emission reductions calculation is not impacted.

### **3.3.10 Sustainable Development Indicator**

#### **3.3.10.1 AQ<sub>y</sub>**

As per the approved revised monitoring plan, AQ<sub>y</sub> is negative air quality effects (emissions other than GHG) that are prevented by processing units.

Air quality has been monitored by Jiangsu Suhuan Project Quality Detection Co., Ltd which is an authorized and independent third party accredited by Provincial Administration of Quality and Technology Supervision(Certificate No. is 201100979U and valid until 07/05/2014). The test report (No. SH2012G0007) indicates that the air quality is in compliance with relevant national standard GB 13271-2001. Therefore, no further monitoring regarding air quality is required according to the registered GS-VER-PDD and the approved revised monitoring plan. The test report and accreditation certificate (/27/) have been obtained and verified by the assessment team.

#### **3.3.10.2 WQ<sub>y</sub>**

As per the approved revised monitoring plan, WQ<sub>y</sub> is negative water quality effects that are prevented by processing units.

**CL #8** is raised through document review and on site visit, the assessment team found that the reported water quality is worse than the previous monitoring periods. The PP is requested to clarify how sustainable development is achieved by the project. In response of this finding, the PP clarified that the water quality was assessed during drought period during this monitoring period, in contrast, the one of last period was assessed during high flow period. Therefore the water quality was different. However, both results are qualified according to the national standard "GB 14848-93" and "GB18918-2002". During the onsite visit, it has been found that the landfill leachate is properly collected and transported to Suzhou Gaoxin wastewater treatment plant for treatment. In addition, the underground water for the project has also been monitored by Jiangsu Suhuan Project Quality Detection Co., Ltd, which is accredited by Provincial Administration of Quality and Technology Supervision(Certificate No. is 201100979U and valid until 07/05/2014). The test report (Report No. is SH2012W0008) and the accreditation certificate of the monitoring entity have been supplied to the assessment team for verification (/28/). It has been verified that the water quality is in compliance with the national standard GB14848-93 and GB18918-2002. The assessment team checked the water quality test report and found the water for testing was sampled on 10/01/2012, which is during the drought period. The response from the PP is reasonable and acceptable. Thus, **CL#8** is closed out.

#### **3.3.10.3 Other Pollutant**

As per the approved revised monitoring plan, other pollutant is noise impacts that are prevented by several approaches.

During the onsite visit, it has been found that muffler has installed to avoid the noise impact on the local citizens and employees. Noise quality has been monitored by Jiangsu Suhuan Project Quality Detection Co., Ltd, which is an authorized and independent third party accredited by Provincial Administration of Quality and Technology Supervision (Certificate No. is 2011009790 and valid until 07/05/2014). The Environmental Impact Assessment report (Report No. is SH2012N000501, SH2012N000502) indicates that the noise quality is in compliance with relevant national standard GB 12348-2008 and GBZ 2.2-2007. Therefore, no

further monitoring regarding noise quality is required according to the registered GS-VER-PDD and the approved revised monitoring plan. The Environmental Impact Assessment report (/18/) and accreditation certificate have been obtained and verified by the assessment team.

#### **3.3.10.4 Employment**

As per the revised monitoring plan, employment includes job quality, fulfilment of labour standards. Parameter employment is monitored by training records (/15/,/17/) and the accounting report (/16/) annually.

During the onsite visit, through interviewing the PPs and document review (/29/), it has been verified that seven people have been provided job for the implementation of Suzhou Qizi Mountain Landfill Gas Recovery Project. Project manager and operators in the plant have learned new knowledge of sophisticated monitoring equipments and computer operations. The content of training program includes How to develop a learning team, Delicacy Management of Production, Study on ERP system, Case Study and Assessment on Plant Accidents, Maintenance of LFG collecting system and Maintenance and Safe Operation of LFG Pre-treatment System..

Training records and the accounting report have been provided for verification. The employees had been interviewed by the assessment team to confirm they had taken the training lessons.

#### **3.3.10.5 Livelihood of the poor**

As per the revised monitoring plan, the livelihood of the poor is monitored by the pay roll accounting for the project.

The accounting report is recorded by the human resource office of the project. People engaged during the monitoring period were recorded in the accounting system of the plant. Pay roll of the employees of local people had been provided to the assessment team as the evidence for verification. And it has been verified that the average monthly payment of six operators has increased as 7389 CNY by the end of this monitoring period. (/26/)

#### **3.3.10.6 Human and institutional capacity**

As per the revised monitoring plan, human and institutional capacity is education or training fee, which needs to be monitored.

People engaged during this monitoring period were recorded in the accounting system of the plant. The number of people engaged, the gender, the responsibilities of them and the training they had taken are all covered in the accounting record, which has been supplied to and verified by the assessment team.

#### **3.3.10.7 Emp<sub>y</sub>**

As per the revised monitoring plan, Emp<sub>y</sub> is the number of people engaged, which needs to be monitored.

People engaged during the monitoring period were recorded in the accounting system of the plant. The number of people engaged, the responsibilities of them and the pay roll are all covered in the accounting record. Accounting record issued by human resource office of the project are provided as the evidence for the monitoring of this parameter in compliance with the revised monitoring plan.

#### **3.3.10.8 $R_{LFG, y}$ : The ratio between the LFG collected and the LFG used within the engines on average each year**

As per the approved revised monitoring plan,  $R_{LFG, y}$  is the ratio between the landfill gas collected and the landfill gas used within the engines on average each year. The parameter needs to be monitored every year.

The actual layout of the entire collection pipelines (/8/), which covers from the well to electricity generator, shows that all the collected landfill gas has been used to generate electricity. During the onsite visit, it has been verified that the total collected landfill gas is directly sent for electricity generation. There are no other pipelines connected at the project site and no landfill gas was used for any other purpose than electricity

generation or sent to the atmosphere directly. So the ratio ( $R_{LFG, y}$ ) between the LFG collected and the LFG used within the engines on average each year is nearly close to 100%, at least higher than 65%.

### **3.4 Accuracy of Equipment**

It was verified that the accuracy of the equipments are consistent with the requirement in the approved revised monitoring plan.

### **3.5 Accuracy of Emission Reduction Calculations**

The calculation of emission reductions in the revised MR Version 6 is found to be correct. Six CARs regarding accuracy of emission reduction calculation were raised, the response to the CARs was satisfactory, relevant correction has been made in the revised MR Version 6, and six CARs were closed. The details of the reported and the verified values for all parameters are listed in section 4, 'Calculation of Emission Reductions'.

### **3.6 Quality of Evidence to Determine Emission Reductions**

Critical parameters used for the determination of the Emission Reductions are discussed in section 3.4 above. All the data recorded is in compliance with the monitoring report.

### **3.7 Management System and Quality Assurance**

As per the registered PDD, the monitoring organization has been established for keeping QA/QC of the project. The staffs training records and the competency certificates of the staffs have been provided for verification. GS Monitoring & Quality Control Manual (/13/) has been provided for verification. It was found that the procedure identified in the GS Monitoring & Quality Control Manual was strictly followed by the PP. Therefore we can affirm that the management system of the project is in place; with the responsibilities properly identified and in place.

In order to verify data quality, the companies involves in the project works in accordance with a quality assurance procedure, which establishes the operational and management structure implemented.

### **3.8 Data from External Sources**

The external data for this project are:

- (1) The emission factor of electricity displaced ( $EF_{grid, CM, y}$ : Emission Factor), which was determined ex-ante and fixed as 0.8847tCO<sub>2</sub>e/MWh for the duration of the crediting period;
- (2) Methane density at standard temperature and air pressure (1.013bar and 0°C), as 0.0007168 tCH<sub>4</sub>/m<sup>3</sup> CH<sub>4</sub> cited from ACM0001;
- (3) GWP<sub>CH<sub>4</sub></sub> as 21 per IPCC value.

The values adopted in the MR comply with the above values

#### 4. Calculation of Emission Reductions

**Table 4.1 Calculation of emission reduction from 01/08/2010 to 31/12/2011 according to the approved revised monitoring plan:**

| Parameter                                    | Reported Value in MR version 1                                                               | Verified Value in MR version 6                                                               |
|----------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| LFG <sub>electricity,y</sub>                 | 18,648,791                                                                                   | 16,053,605                                                                                   |
| W <sub>CH4</sub>                             | 0 to 68.7% for Phase 1 from 01/08/2010-31/12/2010 in ER version 1                            | 48.25% for Phase 1 from 01/08/2010-31/12/2010                                                |
|                                              | 0 to 69.1% for Phase 1 from 01/01/2011-31/12/2011 in ER version 1                            | 55.48% for Phase 1 from 01/01/2011-31/12/2011                                                |
|                                              | 4.2% to 74.3% for Phase 2 from 01/08/2010-31/12/2010 in ER version 1                         | 48.79% for Phase 2 from 01/08/2010-31/12/2010                                                |
|                                              | 0 to 74.6% for Phase 2 from 01/01/2011-31/12/2011 in ER version 1                            | 55.72% for Phase 2 from 01/01/2011-31/12/2011                                                |
| T                                            | N/A, use for calculate the LFG <sub>electricity,y</sub> at standard temperature and pressure | N/A, use for calculate the LFG <sub>electricity,y</sub> at standard temperature and pressure |
| P                                            | N/A, use for calculate the LFG <sub>electricity,y</sub> at standard temperature and pressure | N/A, use for calculate the LFG <sub>electricity,y</sub> at standard temperature and pressure |
| Operation hour of the energy plant           | 12,120 for generator #3                                                                      | 11,249 for generator #3                                                                      |
|                                              | 12,310 for generator #4                                                                      | 12,294 for generator #4                                                                      |
|                                              | 12,260 for generator #5                                                                      | 11,975 for generator #5                                                                      |
| EL <sub>generation</sub> (MWh)               | 34,308                                                                                       | 34,296                                                                                       |
| EL <sub>internal consumption</sub> (MWh)     | 1,896                                                                                        | 1,895                                                                                        |
| EL <sub>LFG</sub> (MWh)                      | 32,412                                                                                       | 32,402                                                                                       |
| ER by EL <sub>LFG</sub> (tCO <sub>2</sub> e) | 28,675                                                                                       | 28,659                                                                                       |
| ER by Methane (tCO <sub>2</sub> e)           | 147,355                                                                                      | 125,050                                                                                      |
| Total ER (tCO <sub>2</sub> e)                | 176,029                                                                                      | 153,709                                                                                      |

**CL #10** is raised about the ER completeness check for the inconsistent report value of methane fraction of Phase 1, the inconsistent report value of the value of LFG (m<sup>3</sup>), the incorrect report value of M1 on 01/12/2011. The assessment team has verified the revised ER calculation version 5, dated 27/02/2013 and the raw logbook accordingly, it is confirmed the revised ER report values are correct. **CL #10** is closed out. Details as below

#### ER:

- The methane fraction of Phase 1 from 03/08/2010 to 31/08/2010 has been corrected to 48.25%,  
The methane fraction of Phase 1 from 03/02/2011 to 28/02/2011 has been corrected to 55.48% and the methane fraction of Phase 2 from 06/07/2011 to 31/07/2011 has been corrected to 55.72%.
- The value of LFG (m<sup>3</sup>) at 1:00 on 09/09/2012 is 628 m<sup>3</sup> actually and has been corrected.
- The value of LFG (m<sup>3</sup>) from 11/09/2010 to 17/09/2010, and 09/09/2011 for phase I is considered to Zero as well in order to be conservative.
- The value of M1 at 24:00 on 01/12/2011 has been corrected to 20583.45

Therefore, total emission reduction achieved in this monitoring period according to the approved revised monitoring plan is calculated as follows:

Emission Reduction from Landfill Gas Recovery calculated as below:

$$ER_{CH4} = \frac{LFG_{electricity,y} \times W_{CH4} \times P_1 \times T_0 \times \rho_0 \times GWP_{CH4}}{P_0 \times T_1}$$

|                       |                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------|
| $ER_{CH4}$            | = Emission reduction from methane avoidance, t                                             |
| $LFG_{electricity,y}$ | = Amount of landfill gas combusted in power plant, m <sup>3</sup>                          |
| $W_{CH4}$             | = Methane fraction in the landfill gas, m <sup>3</sup> CH <sub>4</sub> /m <sup>3</sup> LFG |
| $P_1$                 | = Pressure of landfill gas, kPa                                                            |
| $T_0$                 | = Temperature under standard condition, 0 degree Celsius                                   |
| $\rho_0$              | = Density of methane under standard condition, 0.0007168t/m <sup>3</sup>                   |
| $GWP_{CH4}$           | = Global warming potential of methane, 21 tCO <sub>2</sub> e/tCH <sub>4</sub>              |
| $P_0$                 | = Pressure under standard condition, 101.3 kPa                                             |
| $T_1$                 | = Temperature of landfill gas, degree Celsius                                              |

Emission Reduction from Electricity Generation calculated as below:

$$ER_{electricity} = (EL_{generation} - EL_{internal\ consumption}) * EF_{CM}$$

|                              |                                                                                                                     |
|------------------------------|---------------------------------------------------------------------------------------------------------------------|
| $ER_{electricity}$           | = Emission reduction from electricity generation, tCO <sub>2</sub> e                                                |
| $EL_{generation}$            | = Electricity generation from the generator in the year y, MWh                                                      |
| $EL_{internal\ consumption}$ | = Electricity imported from the grid in the year y, MWh                                                             |
| $EF_{CM}$                    | = Combined margin CO <sub>2</sub> emission factor of East China Power Grid in year y, 0.8847 tCO <sub>2</sub> e/MWh |

The Total ER summary as:

$$\begin{aligned}
 ER &= ER \text{ by Methane (tCO}_2\text{e)} + ER \text{ by } EL_{LFG} \text{ (tCO}_2\text{e)} \\
 &= 125,050 \text{ tCO}_2\text{e} + 28,659 \text{ tCO}_2\text{e} \\
 &= \mathbf{153,709 \text{ tCO}_2\text{e}}
 \end{aligned}$$



## **5. Recommendations for Changes in the Monitoring Plan**

The revised monitoring plan has been approved by GS register on 07/01/2010. No recommendation for changes in the approved revised monitoring plan during this (3rd) periodic verification

## 6. Overview of Results

### Assessment Against the Provisions of Decision 17/CP.7:

Is the project documentation in accordance with the requirements of the registered PDD and relevant provision of decision 17/CP.7, EB decisions and guidance and the COP/MOP?

*Yes. The results of the compliance assessment are recorded in the verification checklist which is used as an internal report only.*

Have on-site inspections been performed that may comprise, inter alia, a review of performance records, interviews with project participants and local stakeholders, collection of measurements, observations of established practices and testing of the accuracy of monitoring equipment?

*Yes. a site visit was undertaken, during which the following took place: interviews, collection of data, audit of the implementation of procedures, calibration certificates and data checked, inter alia.*

*The results of the site visit are recorded in the verification checklist which is used as an internal report only.*

*The evidences have been checked and collected. The revised monitoring report is attached with this verification report.*

Has data from additional sources been used? If yes, please detail the source and significance.

*Yes. Baseline emission factor, 0.8847tCO<sub>2</sub>e/MWh, was determined ex-ante using external sources at validation stage and fixed for the first crediting period; The significance is high and the uncertainty is deemed low.*

*Methane density at standard temperature and air pressure (1.013bar and 0 °C), as 0.0007168 tCH<sub>4</sub>/m<sup>3</sup> CH<sub>4</sub> cited from ACM0001; The significance is high and the uncertainty is deemed low.*

*GWP<sub>CH<sub>4</sub></sub> as 21 per IPCC value; The significance is high and the uncertainty is deemed low.*

Please review the monitoring results and verify that the monitoring methodologies for the estimation of reductions in anthropogenic emissions by sources have been applied correctly and their documentation is complete and transparent.

*Yes. The monitoring methodology has been correctly applied and the monitoring report and supporting references are complete and transparent.*

Have any recommendations for changes to the monitoring methodology for any future crediting period been issued to the project participant?

*No.*

Determine the reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the GS project activity, based on the data and information using calculation procedures consistent with those contained in the registered project design document and the monitoring plan.

*The data used in anthropogenic emission reduction calculation is consistent with those contained in the registered PDD and monitoring plan. The emission reduction was 184,615 tCO<sub>2</sub> for the period 01/08/2010 to 31/12/2011 as per the estimation made in the registered PDD. The actual emission reduction has been verified as 153,709 tCO<sub>2</sub> for the same period.*



Identify and inform the project participants of any concerns related to the conformity of the actual project activity and its operation with the registered project design document. Project participants shall address the concerns and supply relevant additional information.

*No such non conformity of the actual project activity and its operation with the registered project design document has been observed.*

## 7. Verification and Certification Statement

SGS United Kingdom Limited has been contracted by South Pole Carbon Asset Management Ltd. to perform the verification of the emission reductions reported for the GS project Suzhou Qizi Mountain Landfill Gas Recovery Project (GS registry Ref. No. GS 397 & SGS Ref. No. CCP.VOL0702 GS) in the period from 01/08/2010 to 31/12/2011.

The verification is based on the validated and registered project design document, revised monitoring plan and the monitoring report for this project. Verification is performed in accordance with section I of Decision 3/CMP.1, and relevant decisions of the CDM EB, VCS Board and CoP/MoP as well as all related Gold Standard Foundation guidance and decisions. The scope of this engagement covers the verification and certification of greenhouse gas emission reductions generated by the above project during the above mentioned period, as reported in Monitoring Report Version 6 dated 12/03/2013 of Suzhou Qizi Mountain Landfill Gas Recovery Project.

The management of South Pole Carbon Asset Management Ltd. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project Monitoring Report version 6 dated 12/03/2013. Calculation and determination of GHG emission reductions from the project is the responsibility of the management of the Suzhou Qizi Mountain Landfill Gas Recovery Project. The development and maintenance of records and reporting procedures are in accordance with the monitoring report.

It is our responsibility to express an independent GHG verification opinion on the GHG emissions and on the calculation of GHG emission reductions from the project for the period from 01/08/2010 to 31/12/2011 based on the reported emission reductions in the Monitoring Report version 6 dated 12/03/2013 for the same period.

Based on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these, SGS planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that this reported amount of GHG emission reductions for the period is fairly stated.

SGS confirms that the project is implemented as described in the validated and registered project design documents. Based on the information we have seen and evaluated, we confirm the following:

|                                         |                                                                                                |
|-----------------------------------------|------------------------------------------------------------------------------------------------|
| Project Title:                          | Suzhou Qizi Mountain Landfill Gas Recovery Project                                             |
| GS Registry Number:                     | GS 397                                                                                         |
| Registered PDD Used for Verification:   | GS-VER-PDD Version 2.0 dated 08/12/2008 and the revised monitoring plan approved on 07/01/2010 |
| Methodology Used for Verification:      | ACM0001 Version 08 dated 30/11/2007                                                            |
| Applicable Period:                      | 01/08/2010 to 31/12/2011                                                                       |
| Total GHG Emission Reductions Verified: | <b>153,709 tCO<sub>2</sub>e</b>                                                                |

**Signed on behalf of the Verification Body by Authorized Signatory**

Signature: 

Name: Michael Wu

Date: 18/03/2013

Signature: 

Name: Yi Liao

Date: 15/03/2013

## 8. Document References

- /1/ ACM0001 Version 08 dated 30/11/2007, version 08.1 dated 16/05/2008  
<http://cdm.unfccc.int/methodologies/DB/EYUD9R1ZAUZ2XNZXD3HQH18OK3VWIV>
- /2/ GS-VER-PDD Version 2.0 dated 08/12/2008  
[http://mer.markit.com/br-reg/public/project.jsp?project\\_id=103000000002519](http://mer.markit.com/br-reg/public/project.jsp?project_id=103000000002519)
- /3/ Gold standard version 1.0
- /4/ Validation report for the project issued by TÜV NORD dated 16/03/2009 Rev No. 0 Report No. QT-EC0410-08R2-08/567  
Verification report for the 1<sup>st</sup> monitoring period issued by SGS, version 0 dated 13/03/2010, the 2<sup>nd</sup> monitoring period issued by SGS, version 2 dated 01/11/2011
- /5/ The project information is available at:  
[http://mer.markit.com/br-reg/public/project.jsp?project\\_id=103000000002519](http://mer.markit.com/br-reg/public/project.jsp?project_id=103000000002519)
- /6/ Monitoring Report version 1 dated 15/02/2012  
Monitoring Report version 2 dated 31/03/2012  
Monitoring Report version 3 dated 25/05/2012  
Monitoring Report version 4 dated 07/02/2013  
Monitoring Report version 5 dated 27/02/2013  
Monitoring Report version 6 dated 12/03/2013

| MR Version | Date of Revision | Main changes reason for Revision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version 1  | 15/02/2012       | The first version used for verification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Version 2  | 31/03/2012       | <p>The second version of MR: PP revised the monitoring report according to findings raised by the assessment team:</p> <ol style="list-style-type: none"> <li>1. refer to CL#1, The information regarding the actual operation of the project activity during this monitoring in section3</li> <li>2. refer to CAR#2, T and P report value, in section4.5</li> <li>3. refer to CAR#3, input value for W<sub>CH4</sub> in ER calculation</li> <li>4. refer to CAR#4, the calibration information of the meters for the project in section4.5</li> <li>5. refer to CAR#5, data deducted because the equipments were sent to the calibration in section4.5</li> <li>6. refer to CAR#7, corrected the operation hours of the energy plant in section4.5</li> <li>7. refer to CL#8, clarify the water quality test report in section4.5</li> <li>8. refer to CL#9, explaining the significant decreasing of the ER in section5</li> </ol> |

|           |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version 3 | 25/05/2012 | <p>The third version of MR:<br/>Further revision about the Findings raised by assessment team and make the reported information consistent.</p> <ol style="list-style-type: none"> <li>1. refer to CL#1, further revised the information regarding the actual operation of the project activity during this monitoring in section4.5</li> <li>2. refer to CAR#2, further revised the T and P report value in section4.5</li> <li>3. refer to CAR#3, further revised input value for <math>W_{CH4}</math> in ER calculation</li> <li>4. refer to CAR#4, further make revision for the calibration information of the meters for the project, and the adjustment ER according calibration in section4.5</li> <li>5. refer to CAR#5, further data deducted because the equipments were sent to the calibration in section5</li> <li>6. refer to CL#9, further explaining the significant decreasing of the ER in section 5</li> </ol> |
| Version 4 | 07/02/2013 | <ol style="list-style-type: none"> <li>1. refer to CL #10, value for <math>W_{CH4}</math> adjustment in ER calculation</li> <li>2. refer to CAR#11, The value of <math>EL_{LFG}</math> adjustment in ER calculation</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Version 5 | 27/02/2013 | <ol style="list-style-type: none"> <li>1. refer to CAR #11, The value of <math>EL_{LFG}</math> adjustment ER calculation</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Version 6 | 12/03/2013 | <ol style="list-style-type: none"> <li>1. refer to CAR #4, further adjust the T value according to the calibration delay in section 5</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

- /7/ ERs calculation spreadsheet version 1 dated 15/02/2012, version 2 dated 31/03/2013, version 3 dated 25/05/2012, version 4, dated 07/02/2013, version 5 dated 27/02/2013, version 6 dated 12/03/2013
- /8/ Installation layout of the LFG project
- /9/ Calibration reports of meters for the project during this monitoring period
- /10/ Accreditation certification of Suzhou Power Supply Measurement Management Centre
- /11/ Accreditation Certificate of Suzhou Institute of Measurement and Testing Technology
- /12/ Operation logbook of the project for this monitoring period (from 01/08/2010 to 31/12/2011)
- /13/ Manual of generator unit
- /14/ Daily Reading Records and Monthly Reading Records of the Project (from 01/08/2010 to 31/12/2011)
- /15/ Staff training records and competency records
- /16/ The accounting report, including staff list and salary payment sheet
- /17/ Training invoices and documents of the employees and local officials
- /18/ Environmental Impact Assessment report for the project
- /19/ Revised monitoring plan for the project dated 27/09/2009

- /20/ Approval for revised monitoring plan for the project issued by the GS registry dated 07/01/2010
- /21/ Validation and Verification Manual version 01.2 dated 30/07/2010  
Clean development mechanism validation and verification standard Version 03.0, dated 23/11/2012
- /22/ EB 48 Annex 13 "Guidelines to calculate the fraction of methane in the landfill gas from periodical measurements"
- /23/ EB 52 Annex 60 "Guidelines for assessing compliance with the calibration frequency requirements"  
VVS Para 238
- /24/ Approval for Clarification of the emission reduction calculation for the project issued by the GS registry dated 19/01/2010
- /25/ A clarification dated 02/06/2011 raised by SGS to GS registry for this monitoring period  
And GS registry raised two comments about the clarification to PPs and DOE on 27/06/2011
- /26/ average monthly payment of six operators for the project  
Letter of family income
- /27/ The test report (No. SH2012G0007) of the air quality, accredited by Provincial Administration of Quality and Technology Supervision.
- /28/ The test report (No. SH2012W0008) of the water quality, accredited by Provincial Administration of Quality and Technology Supervision.
- /29/ MANAGE ROSTER, dated on 30/12/2011

## 9. Findings Overview

|                     | CARs | CLs | FARs |
|---------------------|------|-----|------|
| Total Number raised | 7    | 4   | 0    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |            |                           |            |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|------------|------------------------|
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 15/03/2012 | Raised by: | Liao Yi, Tracy ZHENG Ying |            |                        |
| Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CL         | Number:    | #1                        | Reference: | Section 2 of Checklist |
| Lead Assessor Comment:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            | Date: 16/03/2012          |            |                        |
| According to para. 10 (a) (i) of “Guidelines on completeness check of requests for issuance” (EB48, Annex 68) the implementation status of the project during the monitoring period under consideration shall be contained in the monitoring report. Please add the information regarding the actual operation of the project activity during this monitoring period in the monitoring report, especially information on special events, for example overhaul times, downtimes of equipment, exchange of equipment, emergency process etc. and events or situations that occurred during the monitoring period, which may impact the applicability of the methodology and how the issues resulting from these events or situations are being addressed. |            |            |                           |            |                        |
| Project Participant Response:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |            | Date: 31/03/2012          |            |                        |
| More information has been added up in the section 3 of the updated monitoring report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |            |                           |            |                        |
| Documentation Provided as Evidence by Project Participant:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |            |                           |            |                        |
| Daily logbooks have been provided.<br>MR version 2, dated 31/03/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |            |                           |            |                        |
| Information Verified by Lead Assessor:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |            |                        |
| The Monitoring Report version 2, dated 31/03/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |            |                           |            |                        |
| Reasoning for not Acceptance or Acceptance and Close Out:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |            |                           |            |                        |
| The information regarding the actual operation of the project activity during this monitoring period has already been added in the section 3 of the MR version 2. However, the daily logbooks haven't been provided yet. Thus, the assessment team cannot verify the authenticity of the information added in the MR. CL#1 is still open.                                                                                                                                                                                                                                                                                                                                                                                                               |            |            |                           |            |                        |
| Project Participant Response:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |            | Date: 25/05/2012          |            |                        |
| The Daily logbooks from 02/08/2010 to 05/08/2010 shows that the downtimes of generator I was from 08:00 on 02/08/2010 to 18:00 on 05/08/2010, the reading record of M1 was stopped at 15278.11 during this period. The Daily logbooks from 25/11/2011 to 31/12/2011 shows that the downtimes of generator I was from 16:00 on 25/11/2011 to 24:00 on 31/12/2011, the reading record of M1 was stopped at 20583.45 during this period. The Daily logbooks from 08/10/2011 to 15/10/2011 shows that the downtimes of generator III was from 08:00 on 08/10/2011 to 14:00 on 15/10/2011, the reading record of M3 was stopped at 12686.214 during this period.                                                                                             |            |            |                           |            |                        |
| Documentation Provided as Evidence by Project Participant:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |            |                           |            |                        |
| Daily logbooks from 02/08/2010 to 05/08/2010, daily logbooks from 25/11/2011 to 31/12/2011 and daily logbooks from 08/10/2011 to 15/10/2011 have been provided.<br>MR version 3, dated 25/05/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |            |                           |            |                        |
| Information Verified by Lead Assessor:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |            |                        |
| The Monitoring Report version 3, dated 25/05/2012<br>The logbook in the generators downtimes period when from 02/08/2010 to 05/08/2010, from 25/11/2011 to 31/12/2011 and from 08/10/2011 to 15/10/2011.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |            |                           |            |                        |
| Reasoning for not Acceptance or Acceptance and Close Out:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |            |                           |            |                        |
| The information regarding the actual operation of the project activity during this monitoring period has revised accordingly in the section 3 of the MR version 3. The assessment team has verified and confirmed the reported information consistent with the daily book in the specific period. CL #1 is closed out.                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |            |                        |
| Acceptance and Close out by Lead Assessor: Yi Liao                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |            | Date: 08/01/2013          |            |                        |

|                                                                                                                                                                                                                                                                                                                                                                                                |            |            |                           |            |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|------------|------------------------|
| Date:                                                                                                                                                                                                                                                                                                                                                                                          | 15/03/2012 | Raised by: | Liao YI, Tracy ZHENG Ying |            |                        |
| Type:                                                                                                                                                                                                                                                                                                                                                                                          | CAR        | Number:    | #2                        | Reference: | Section 3 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                  |            |            | <b>Date:</b> 16/03/2012   |            |                        |
| The reported data of amount of landfill gas combusted in power plant at standard temperature and pressure and the electricity generated using the landfill gas in August, September and October, 2010 and January, February, March, April, May, June, July and October, 2011 are inconsistent with the verified result of the assessment team, please make relevant correction in this regard. |            |            |                           |            |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                           |            |            | <b>Date:</b> 31/03/2012   |            |                        |
| The reported data of amount of landfill gas combusted in power plant at standard temperature and pressure and the electricity generated using the landfill gas in August, September and October, 2010 and January, February, March, April, May, June, July and October, 2011 <i>has been corrected</i> .                                                                                       |            |            |                           |            |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                              |            |            |                           |            |                        |
| <i>Updated ER spreadsheets have been provided, version 2 dated 31/03/2012</i>                                                                                                                                                                                                                                                                                                                  |            |            |                           |            |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |            |                        |
| Updated ER spreadsheets, version 2 dated 31/03/2012                                                                                                                                                                                                                                                                                                                                            |            |            |                           |            |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                               |            |            |                           |            |                        |
| The assessment team checked the updated ER spreadsheet provided and found there still are some reported data inconsistent with the verified result. Thus, further revision are needed. CAR#2 is still open.                                                                                                                                                                                    |            |            |                           |            |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                           |            |            | <b>Date:</b> 25/05/2012   |            |                        |
| <i>In ER sheet "Monitoring_Data_Suzhou_LFG(2010_08) with lower bound"</i><br>-Sheet 3/Cell 23B has been revised to 6.8<br>-Sheet 26/Cell 29Z has been revised to 7.0                                                                                                                                                                                                                           |            |            |                           |            |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                              |            |            |                           |            |                        |
| <i>Revised "Monitoring_Data_Suzhou_LFG(2010_08) with lower bound"</i>                                                                                                                                                                                                                                                                                                                          |            |            |                           |            |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |            |                        |
| The Monitoring Report version 3, dated 25/05/2012, ER version 3, dated 25/05/2012<br>Revised "Monitoring_Data_Suzhou_LFG(2010_08) with lower bound"                                                                                                                                                                                                                                            |            |            |                           |            |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                               |            |            |                           |            |                        |
| The assessment team checked the updated ER spreadsheet provided and verified the reported data are correct. CAR #2 is closed out.                                                                                                                                                                                                                                                              |            |            |                           |            |                        |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                                                                                                                                                                                                      |            |            | <b>Date:</b> 08/01/2013   |            |                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |            |                           |            |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|------------|------------------------|
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 15/03/2012 | Raised by: | Liao YI, Tracy ZHENG Ying |            |                        |
| Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | CAR        | Number:    | #3                        | Reference: | Section 3 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |            | <b>Date:</b> 16/03/2012   |            |                        |
| First, during the onsite visit, it was found that the parameter $W_{CH_4}$ is measured hourly by a portable equipment. Please clarify how the EB48 Annex13 "Guidelines to calculate the fraction of methane in the landfill gas from periodical measurements" and the revised monitoring plan are followed during the emission reductions calculation process.<br>And the serial number of portable gas analyzer W indicated in the monitoring report version 1 is inconsistent with the verified result. Please clarify and make relevant correction if necessary.<br>In addition, through on site visit, the assessment team found that the old portable gas analyzer was out of order since 28/12/2011 and had not been replaced by the new portable gas analyzer until 03/01/2012. Please adjust the emission reductions claimed during this period according to the approved revised monitoring plan. |            |            |                           |            |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |            | <b>Date:</b> 31/03/2012   |            |                        |
| <i>The lower bound has been calculated and applied.</i><br><i>The serial number has been corrected.</i><br><i>ER has been adjusted.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |            |                           |            |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            |            |                           |            |                        |
| <i>Updated ER spreadsheets have been provided, dated 31/03/2012, MR version 2, dated 31/03/2012</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |            |                           |            |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |            |                           |            |                        |
| Updated ER spreadsheets, version 2 dated 31/03/2012<br>The Monitoring Report version 2, dated 31/03/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |            |                           |            |                        |

| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <p>The assessment team checked the updated ER spreadsheet and found that some input values of measured <math>W_{CH_4}</math> for calculating lower bound of 95% confidence interval <math>CH_4</math> fraction are inconsistent with the verified result. Please further revise the updated ER spreadsheet in this regard.</p> <p>The assessment team checked the MR version 2 and found the serial number of analyzer W indicated in the MR version2 is revised and consistent with the verified result.</p> <p>During period from 28/12/2011 to 31/12/2011, there was no gas analyzer available since the old one out of order and the new one hadn't been put into use yet. The assessment team checked the updated ER spreadsheet and found that the emission reductions achieved on 28/12/2011, 29/12/2011, 30/12/2011 are eliminated and not claimed for issuance. However, the emission reductions achieved on 31/12/2011 are still claimed for issuance. Please explain why the emission reductions on 31/12/2011 are still claimed when there was no gas analyzer available, how the approved revised monitoring plan is followed.</p> <p>CAR#3 is still open</p> |                         |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Date:</b> 25/05/2012 |

*In ER sheet "95% confidence of W commented"*

- Sheet Phase 1 (2010)/Date information has been revised to 2010
- Sheet Phase 1 (2010)/Cell 42D has been revised to 51.40%
- Sheet Phase 1 (2010)/Cell 29J has been revised to 50.80%
- Sheet Phase 1 (2010)/Cell 23I has been revised to 51.30%
- Sheet Phase 2 (2010)/Date information has been revised to 2010
- Sheet Phase 2 (2010)/Cell 75S has been revised to 49.90%
- Sheet Phase 2 (2010)/Cell 152L has been revised to 43.80%

*-Therefore the lower bound of W for phase 1 in 2010 has been changed to 48.26%, and the lower bound of W for phase 2 in 2010 has been changed to 48.79%. The ER spreadsheets , "Monitoring\_Data\_Suzhou\_LFG(2010\_08) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2010\_09) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2010\_10) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2010\_11) with lower bound" and "Monitoring\_Data\_Suzhou\_LFG(2010\_12) with lower bound", have been revised accordingly.*

- Sheet Phase 1 (2011)/Date information has been revised to 2011
- Sheet Phase 1 (2011)/Cell 256E has been revised to 60.40%
- Sheet Phase 1 (2011)/Cell 238R has been revised to 73.70%
- Sheet Phase 1 (2011)/Cell 125T has been revised to 55.40%
- Sheet Phase 1 (2011)/Cell 122Y has been revised to 55.50%
- Sheet Phase 1 (2011)/Cell 180G has been revised to 62.00%
- Sheet Phase 1 (2011)/Cell 188H has been revised to 60.20%
- Sheet Phase 1 (2011)/Cell 276N has been revised to 60.80%
- Sheet Phase 2 (2011)/Date information has been revised to 2011
- Sheet Phase 2 (2011)/Cell 122U has been revised to 55.50%
- Sheet Phase 2 (2011)/Cell 238I has been revised to 59.20%
- Sheet Phase 2 (2011)/Cell 137P has been revised to 59.80%
- Sheet Phase 2 (2011)/Cell 138L has been revised to 58.40%
- Sheet Phase 2 (2011)/Cell 139Q has been revised to 58.80%
- Sheet Phase 2 (2011)/Cell 141N has been revised to 59.30%
- Sheet Phase 2 (2011)/Cell 335O has been revised to 50.70%

*-Therefore the lower bound of W for phase 1 in 2011 has been changed to 55.64%, and the lower bound of W for phase 2 in 2011 has been changed to 56.01%. The ER spreadsheets , "Monitoring\_Data\_Suzhou\_LFG(2011\_01) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_02) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_03) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_04) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_05) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_06) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_07) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_08) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_09) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_10) with lower bound", "Monitoring\_Data\_Suzhou\_LFG(2011\_11) with lower bound" and "Monitoring\_Data\_Suzhou\_LFG(2011\_12) with lower bound", have been revised accordingly.*

*The emission reductions achieved on 31/12/2011 are eliminated and not claimed for issuance.*

**Documentation Provided as Evidence by Project Participant:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |                         |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-------------------------|--|
| <i>Revised "95% confidence of W commented"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2010_09) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2010_10) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2010_11) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2010_12) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_01) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_02) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_03) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_04) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_05) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_06) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_07) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_08) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_09) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_10) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_11) with lower bound"</i><br><i>Revised "Monitoring_Data_Suzhou_LFG(2011_12) with lower bound"</i> |  |  |  |                         |  |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |                         |  |
| The Monitoring Report version 3, dated 25/05/2012<br>Revised ER calculation, dated 25/05/2012<br>Revised of ER sheet "95% confidence of W commented"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |                         |  |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |                         |  |
| The assessment team verified the updated ER spreadsheet provided and confirmed the reported data are correct. CAR #3 is closed out.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |                         |  |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  | <b>Date: 08/01/2013</b> |  |

|       |            |         |            |                           |                        |
|-------|------------|---------|------------|---------------------------|------------------------|
| Date: | 15/03/2012 |         | Raised by: | Liao YI, Tracy ZHENG Ying |                        |
| Type: | CAR        | Number: | #4         | Reference:                | Section 3 of Checklist |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |                         |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------|--|--|
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  | <b>Date: 16/03/2012</b> |  |  |
| <p>Through document review, the assessment team found that the calibration of the thermometer T1, T2, T3 and T4 had been delayed and cannot cover the whole monitoring period from 01/08/2010 to 31/12/2011. For T1 and T3, the period from 22/04/2011 to 04/05/2011 is not covered and the calibration is delayed as per the frequency specified in JJG226-2001 – Verification Regulation of Bimetallic Thermometers issued by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China. For T2 and T4, the period from 22/04/2011 to 13/07/2011 is not covered and the calibration is delayed as per the frequency specified in JJG226-2001 – Verification Regulation of Bimetallic Thermometers issued by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China. In addition, the calibration reports of old T2 (S/N: 4) and new T2 (S/N: 1107301) dated 22/04/2010 and 14/07/2011 respectively all showed that the error identified in the calibration tests beyond the maximum permissible error of the monitoring equipments. The calibration report of old T3 (S/N: 1) dated 22/04/2010 showed that the error identified in the calibration test beyond the maximum permissible error of the old T3. The calibration report of new T4 (S/N: 1107307) dated 14/07/2011 showed that the error identified in the calibration test beyond the maximum permissible error of the new T4 and the new T4 was unqualified. PP shall clarify how the "Guidelines for assessing compliance with the calibration frequency requirements" are followed when calculating the emission reductions. In addition, the assessment team found that the calibration date of new T4 reported in the monitoring report version 1 is inconsistent with the verified result. PP shall clarify in this regard and make relevant correction if necessary. Moreover, please provide the dismantlement information of the old T1, T2, T3 T4 and the installation information of the new T1, T2, T3 and T4. And adjust the emission reductions calculation if necessary.</p> |  |  |                         |  |  |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  | <b>Date: 31/03/2012</b> |  |  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Apply 2% as the most conservative error for Temperature of phase I until 18/07/2011. Apply 2.5% as the most conservative error for Temperature of phase I from 2011/07/19. Apply 4% as the most conservative error for Temperature of phase II until 2011/05/08. Apply 1.5% as the most conservative error for Temperature of phase II from 2011/05/09 to 2011/07/18. Apply 4.2% as the most conservative error for Temperature of phase II from 2011/07/19. |                         |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| <i>Updated ER spreadsheets have been provided, version 2 dated 31/03/2012</i>                                                                                                                                                                                                                                                                                                                                                                                |                         |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                |                         |
| Updated ER spreadsheets, <i>version 2</i> dated 31/03/2012                                                                                                                                                                                                                                                                                                                                                                                                   |                         |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                             |                         |
| The assessment team cannot conclude the emission reduction adjustment is correct or not the dismantlement information of the old T1, T2, T3 T4 and the installation information of the new T1, T2, T3 and T4 haven't be provided yet.<br>Thus, CAR#4 is still open.                                                                                                                                                                                          |                         |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Date:</b> 25/05/2012 |
| <i>On 28/04/2011, the old T1 and T3 were dismantled.<br/>On 05/05/2011, the New T1 and T3 were calibrated.<br/>On 09/05/2011, the New T1 and T3 were installed.<br/>On 11/07/2011, the old T2 and T4 were dismantled.<br/>On 14/07/2011, the New T2 and T4 were calibrated.<br/>On 19/07/2011, the New T2 and T4 were installed.<br/>PP will note these information more completely in the logbooks during next monitoring period.</i>                       |                         |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| <i>"28/04/2011_Old T1 and T3 dismantlement information"<br/>"05/05/2011_New T1 (05-03)_Calibration Report"<br/>"05/05/2011_New T3 (05-04)_Calibration Report"<br/>"09/05/2011_New T1 and T3 installation information"<br/>"11/07/2011_Old T2 and T4 dismantlement information"<br/>"14/07/2011_New T2 (1107301)_Calibration Report"<br/>"14/07/2011_New T4 (1107307)_Calibration Report"<br/>"19/07/2011_New T2 and T4 installation information"</i>         |                         |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                |                         |
| ER calculation version 3, dated 25/05/2012<br>T1, T2, T3 and T4 calibration report covered the 3 <sup>rd</sup> monitoring period.                                                                                                                                                                                                                                                                                                                            |                         |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                             |                         |
| The assessment team verified the emission reduction adjustment is correct;<br>The T1, T2, T3 and T4 calibration information reported is verified and confirmed by the assessment team.<br>Thus, CAR#4 is closed out.                                                                                                                                                                                                                                         |                         |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Date:</b> 08/01/2013 |
| <b>Re-open during TR stage</b>                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>12/03/2013</b>       |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Date:</b> 12/03/2013 |
| <i>As the validity is 1 year, the calibration of the old T1, old T2, old T3 and old T4 are due on 21/04/2011, there are still a period in use before it is replaced. Thus, it is defined as a delay. Following related requirement (e.g. VVSPara240) about delayed calibration, the meter needs to be calibrated to determine the accuracy. It is required to adjust the ER calculation accordingly.</i>                                                     |                         |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Date:</b> 13/03/2013 |
| The ER by Methane from 21/04/2011 to 09/05/2011 has been not taken in account in order to be conservative for the defined delay.                                                                                                                                                                                                                                                                                                                             |                         |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| <i>12032013_Emission Reduction of Suzhou_LFG;<br/>12032013_Monitoring report version 6 of the 3rd monitoring period;<br/>Monitoring_Data_Suzhou_LFG(2011_04) with lower bound;<br/>Monitoring_Data_Suzhou_LFG(2011_05) with lower bound.</i>                                                                                                                                                                                                                 |                         |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| MR version 6, dated 12/03/2013<br>ER version 6, dated 12/03/2013<br><i>Monitoring_Data_Suzhou_LFG(2011_04) with lower bound;</i><br><i>Monitoring_Data_Suzhou_LFG(2011_05) with lower bound.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| <p>The assessment team verified the temperature meter T1, T2, T3 and T4 calibration validity and meter replacement as below:<br/> old T1 validity from 22/04/2010 – 21/04/2011, new T1 validity from 05/05/2011 – 04/05/2012, the replacement on 09/05/2011<br/> old T2 validity from 22/04/2010 – 21/04/2011, new T2 validity from 14/07/2011 – 13/07/2012, the replacement on 19/07/2011<br/> old T3 validity from 22/04/2010 – 21/04/2011, new T3 validity from 05/05/2011 – 04/05/2012, the replacement on 09/05/2011<br/> old T4 validity from 22/04/2010 – 21/04/2011, new T3 validity from 14/07/2011 – 13/07/2012, the replacement on 19/07/2011<br/> The T1 and T2 installed on phase I, monitored the temperature as cross-check for each other, if one meter is not validity, the staff will read the data from another one. The delay calibration period for phase I can deem as from 21/04/2011 to 09/05/2011<br/> The T3 and T4 installed on phase II, monitored the temperature as cross-check for each other, if one meter is not validity, the staff will read the data from another one. The delay calibration period for phase II is from 21/04/2011 to 09/05/2011.<br/> For the calibration period, the ER by Methane from 21/04/2011 to 09/05/2011 has been not taken in account in order to be conservative. The assessment team has verified the ER and monthly monitoring data is correct. CAR#4 is closed out.</p> |                         |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Date: 14/03/2013</b> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |            |                           |                         |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|-------------------------|------------------------|
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 15/03/2012 | Raised by: | Liao YI, Tracy ZHENG Ying |                         |                        |
| Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CAR        | Number:    | #5                        | Reference:              | Section 3 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |            |                           | <b>Date:</b> 16/03/2012 |                        |
| Through document review, the assessment team found that the calibration of the thermometer P1 and P3 had been delayed and cannot cover the whole monitoring period from 01/08/2010 to 31/12/2011.<br>For P1 and P3, both the period from 14/09/2010 to 15/09/2010 and the period from 16/03/2011 to 17/03/2011 are not covered; the calibration is delayed as per the frequency specified in JJG573-2003 - Verification regulation of diaphragm pressure gauge issued by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China.<br>PP shall clarify how the "Guidelines for assessing compliance with the calibration frequency requirements" are followed when calculating the emission reductions.<br>And the assessment team found that the calibration date of P3 reported in the monitoring report version 1 is inconsistent with the verified result. PP shall clarify in this regard and make relevant correction if necessary. |            |            |                           |                         |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |            |                           | <b>Date:</b> 31/03/2012 |                        |
| Apply 2.5% as the most conservative error pressure of phase I and II from 16/03/2011 to 17/03/2011,<br>The calibration date of P3 has been corrected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |            |                           |                         |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |            |                           |                         |                        |
| Updated ER spreadsheets have been provide, .version 2 dated 31/03/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |            |                           |                         |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |            |                           |                         |                        |
| the monitoring report version 2, dated 31/03/2012<br>updated ER spreadsheets, version 2 dated 31/03/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |            |                           |                         |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |            |                           |                         |                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <p>The calibration date of P3 reported in the monitoring report version 2 has been revised and found to be correct.</p> <p>According to the latest version of "Guidelines for assessing compliance with the calibration frequency requirements", the conservative deduction shall be applied during the period between the scheduled date of calibration and the actual date of calculation. Please explain why only emission reductions achieved during period from 16/03/2011 to 17/03/2011 are calculated for 2.5% conservative deduction, since the delayed calibration is identified both during period from 14/09/2010 to 15/09/2010 and the period from 16/03/2011 to 17/03/2011, which is not compliance with the guidelines mentioned above.</p> <p>Thus, CAR#5 is still open.</p> |                         |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Date:</b> 25/05/2012 |
| <p>Apply 2.5% as the most conservative error pressure of phase I and II for both during period from 14/09/2010 to 15/09/2010 and the period from 16/03/2011 to 17/03/2011. However according to CAR#6, "The pressure meter P1 (S/N: 09.4.13.163) and P3 (S/N: 09.4.13.158) were sent to the calibration entity for calibration during 11/09/2010 - 17/09/2010, 15/03/2011 - 23/03/2011, 09/09/2011 - 16/09/2011. The parameter temperature of the landfill gas for the above mentioned periods can not be monitored", the data of has been deleted in the end.</p>                                                                                                                                                                                                                          |                         |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |
| Revised "Monitoring_Data_Suzhou_LFG(2010_09) with lower bound"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| Revised "Monitoring_Data_Suzhou_LFG(2011_03) with lower bound"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |
| Updated ER spreadsheets, version 3 dated 25/05/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |
| Revised "Monitoring_Data_Suzhou_LFG(2010_09) with lower bound"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| Revised "Monitoring_Data_Suzhou_LFG(2011_03) with lower bound"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |
| The assessment team has verified the adjustment of ER spreadsheet for the P1 and P3 delay period, and confirmed the data was adopted for the conservative and the ER calculation is correct. CAR #5 is closed out.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |
| <b>Acceptance and Close out by Lead Assessor:</b> Yi Liao                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Date:</b> 08/01/2013 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |                         |                           |                   |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|---------------------------|-------------------|------------------------|
| <b>Date:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 15/03/2012 | <b>Raised by:</b>       | Liao YI, Tracy ZHENG Ying |                   |                        |
| <b>Type:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CAR        | <b>Number:</b>          | #6                        | <b>Reference:</b> | Section 3 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            | <b>Date:</b> 16/03/2012 |                           |                   |                        |
| <p>The flow meter F1 (S/N: 01965563) and F2 (S/N: FD21246A) were sent to the calibration entity for calibration from 24/05/2011 to 28/05/2011. The parameter amount of landfill gas combusted in power plant at standard temperature and pressure for this period can not be monitored.</p> <p>The temperature meter new T1 (S/N: 05-03) and new T3 (S/N: 05-04) were sent to the calibration entity for calibration from 28/04/2011 to 09/05/2011. The temperature meter new T2 (S/N: 1107301) and new T4 (S/N: 1107307) were sent to the calibration entity for calibration from 11/07/2011 to 19/07/2011. The parameter temperature of the landfill gas for this period can not be monitored.</p> <p>The pressure meter P2 (S/N: 10.3.2.254) and P4 (S/N: 10.3.2.267) were sent to the calibration entity for calibration during 19/10/2010 - 02/11/2010, 15/03/2011 - 23/03/2011, 09/09/2011 - 16/09/2011. The pressure meter P1 (S/N: 09.4.13.163) and P3 (S/N: 09.4.13.158) were sent to the calibration entity for calibration during 11/09/2010 - 17/09/2010, 15/03/2011 - 23/03/2011, 09/09/2011 - 16/09/2011. The parameter temperature of the landfill gas for the above mentioned periods can not be monitored.</p> <p>According to the approved revised monitoring plan, "when the meter operates abnormally during a month or any other unexpected problems occur, the amount of LFG generated shall not be counted." Please make relevant revision in this regard.</p> |            |                         |                           |                   |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            | <b>Date:</b> 31/03/2012 |                           |                   |                        |
| <p>The amount of LFG generated shall not be counted, since The flow meter F1 (S/N: 01965563) and F2 (S/N: FD21246A) were sent to the calibration entity for calibration from 24/05/2011 to 28/05/2011.</p> <p>The amount of LFG generated shall not be counted, since The pressure meter P2 (S/N: 10.3.2.254) and P4 (S/N: 10.3.2.267) were sent to the calibration entity for calibration during 19/10/2010 - 02/11/2010, 15/03/2011 - 23/03/2011, 09/09/2011 - 16/09/2011.</p> <p>The amount of LFG generated shall not be counted, since The pressure meter P1 (S/N: 09.4.13.163) and P3 (S/N: 09.4.13.158) were sent to the calibration entity for calibration during 11/09/2010 - 17/09/2010, 15/03/2011 - 23/03/2011, 09/09/2011 - 16/09/2011.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                         |                           |                   |                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |
| <i>Updated ER spreadsheets have been provided. version 2 dated 31/03/2012</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |
| <i>Updated ER spreadsheets, version 2 dated 31/03/2012</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |
| <p>The assessment team checked the updated ER spreadsheet and found that the amount of LFG generated during period from 24/05/2011 to 28/05/2011 are not counted.</p> <p>The assessment team checked the updated ER spreadsheet and found the following issues:</p> <ol style="list-style-type: none"> <li>1. The amount of LFG generated are still counted during period from 28/04/2011 to 09/05/2011, although the temperature meter new T1 (S/N: 05-03) and new T3 (S/N: 05-04) were sent to the calibration entity for calibration.</li> <li>2. The amount of LFG generated are still counted during period from 11/07/2011 to 19/07/2011, although the temperature meter new T2 (S/N: 1107301) and new T4 (S/N: 1107307) were sent to the calibration entity for calibration.</li> <li>3. The amount of LFG generated are still counted during 19/10/2010 - 02/11/2010, 15/03/2011 – 23/03/2011, 09/09/2011 – 16/09/2011, although the pressure meter P2 (S/N: 10.3.2.254) and P4 (S/N: 10.3.2.267) were sent to the calibration entity for calibration.</li> <li>4. The amount of LFG generated are still counted during 19/10/2010 - 02/11/2010, 15/03/2011 – 23/03/2011, 09/09/2011 – 16/09/2011, although the pressure meter P1 (S/N: 09.4.13.163) and P3 (S/N: 09.4.13.158) were sent to the calibration entity for calibration.</li> </ol> <p>Please explain how the approved revised monitoring plan is followed. CAR#6 is still open.</p> |                         |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Date:</b> 25/05/2012 |
| <p><i>The amount of LFG generated has been not counted during period from 28/04/2011 to 09/05/2011, since the temperature meter new T1 (S/N: 05-03) and new T3 (S/N: 05-04) were sent to the calibration entity for calibration.</i></p> <p><i>The amount of LFG generated has been not counted during period from 11/07/2011 to 19/07/2011, since the temperature meter new T2 (S/N: 1107301) and new T4 (S/N: 1107307) were sent to the calibration entity for calibration.</i></p> <p><i>The amount of LFG generated has been counted during 19/10/2010 - 02/11/2010, 15/03/2011 – 23/03/2011, 09/09/2011 – 16/09/2011, since the pressure meter P2 (S/N: 10.3.2.254) and P4 (S/N: 10.3.2.267) were sent to the calibration entity for calibration.</i></p> <p><i>The amount of LFG generated has been counted during 19/10/2010 - 02/11/2010, 15/03/2011 – 23/03/2011, 09/09/2011 – 16/09/2011, since the pressure meter P1 (S/N: 09.4.13.163) and P3 (S/N: 09.4.13.158) were sent to the calibration entity for calibration.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                               |                         |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |
| <p><i>Revised "Monitoring_Data_Suzhou_LFG(2010_10) with lower bound"</i></p> <p><i>Revised "Monitoring_Data_Suzhou_LFG(2010_11) with lower bound"</i></p> <p><i>Revised "Monitoring_Data_Suzhou_LFG(2011_03) with lower bound"</i></p> <p><i>Revised "Monitoring_Data_Suzhou_LFG(2011_04) with lower bound"</i></p> <p><i>Revised "Monitoring_Data_Suzhou_LFG(2011_05) with lower bound"</i></p> <p><i>Revised "Monitoring_Data_Suzhou_LFG(2011_07) with lower bound"</i></p> <p><i>Revised "Monitoring_Data_Suzhou_LFG(2011_09) with lower bound"</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |
| <i>Updated ER spreadsheets, version 3 dated 25/05/2012</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |
| <p>The assessment team has verified the adjustment of ER spreadsheet for the calibration delay period, and confirmed the data was adopted for the conservative and the ER calculation is correct. CAR #6 is closed out.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Date:</b> 08/01/2013 |

|                                                                                                                                                                                                           |            |            |                           |                         |                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|-------------------------|------------------------|
| Date:                                                                                                                                                                                                     | 15/03/2012 | Raised by: | Liao YI, Tracy ZHENG Ying |                         |                        |
| Type:                                                                                                                                                                                                     | CAR        | Number:    | #7                        | Reference:              | Section 3 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                             |            |            |                           | <b>Date:</b> 16/03/2012 |                        |
| The Operation hours of the energy plant reported in the monitoring report version 1 is inconsistent with the verified result by the assessment team. Please correct the monitoring report in this regard. |            |            |                           |                         |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                      |            |            |                           | <b>Date:</b> 31/03/2012 |                        |
| The Operation hours of the energy plant reported in the monitoring report version 1 is corrected.                                                                                                         |            |            |                           |                         |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                         |            |            |                           |                         |                        |
| <i>Updated ER spreadsheet has been provided. version 2 dated 31/03/2012</i>                                                                                                                               |            |            |                           |                         |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                             |            |            |                           |                         |                        |
| The monitoring report version 2, <i>dated 31/03/2012</i>                                                                                                                                                  |            |            |                           |                         |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                          |            |            |                           |                         |                        |
| Please clearly in which version of MR, the operation hours of the energy plant is corrected.<br>CAR#7 is still open.                                                                                      |            |            |                           |                         |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                      |            |            |                           | <b>Date:</b> 25/05/2012 |                        |
| <i>The operation hours of the energy plant has been corrected on page 26 and 32 of the updated monitoring report, "23/05/2012_Monitoring report version 3 of the 3rd monitoring period".</i>              |            |            |                           |                         |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                         |            |            |                           |                         |                        |
| <i>25/05/2012_Monitoring report version 3 of the 3<sup>rd</sup> monitoring period, dated 25/05/2012</i>                                                                                                   |            |            |                           |                         |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                             |            |            |                           |                         |                        |
| Updated ER spreadsheets version 3 dated <i>25/05/2012</i><br>MR version 3 dated 25/05/2012                                                                                                                |            |            |                           |                         |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                          |            |            |                           |                         |                        |
| The assessment team checked and confirmed the revised operation hours of the energy plant consistent with the onsite verified and corrected. CAR #7 is closed out.                                        |            |            |                           |                         |                        |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                 |            |            |                           | <b>Date:</b> 08/01/2013 |                        |

|                                                                                                                                                                                                                                                                                                                                                                                    |            |            |                           |            |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|------------|------------------|
| Date:                                                                                                                                                                                                                                                                                                                                                                              | 15/03/2012 | Raised by: | Liao YI, Tracy ZHENG Ying |            |                  |
| Type:                                                                                                                                                                                                                                                                                                                                                                              | CL         | Number:    | #8                        | Reference: | Section 3 of AU4 |
| Lead Assessor Comment:                                                                                                                                                                                                                                                                                                                                                             |            |            | Date: 16/03/2012          |            |                  |
| Through document review and on site visit, the assessment team found that the reported water quality is worse than the previous monitoring periods. Please clarify how sustainable development is achieved by the project.                                                                                                                                                         |            |            |                           |            |                  |
| Project Participant Response:                                                                                                                                                                                                                                                                                                                                                      |            |            | Date : 31/03/2011         |            |                  |
| The water quality was assessed during drought period during this monitoring period, in contrast, the one of last period was assessed during high flow period. Therefore the water quality was different. However, both results are qualified according to the national standard “GB 14848-93” and “GB18918-2002”.                                                                  |            |            |                           |            |                  |
| Documentation Provided as Evidence by Project Participant:                                                                                                                                                                                                                                                                                                                         |            |            |                           |            |                  |
| Technical Guideline for Environment Impact Assessment Technical Review is provided. Check the following link:<br><a href="http://www.mep.gov.cn/pv_obj_cache/pv_obj_id_78018B00CD897305072A62051A5FCC898B6B0600/filename/W020081020546148414401.pdf">http://www.mep.gov.cn/pv_obj_cache/pv_obj_id_78018B00CD897305072A62051A5FCC898B6B0600/filename/W020081020546148414401.pdf</a> |            |            |                           |            |                  |
| Information Verified by Lead Assessor:                                                                                                                                                                                                                                                                                                                                             |            |            |                           |            |                  |
| Technical Guideline for Environment Impact Assessment Technical Review                                                                                                                                                                                                                                                                                                             |            |            |                           |            |                  |
| Reasoning for not Acceptance or Acceptance and Close Out:                                                                                                                                                                                                                                                                                                                          |            |            |                           |            |                  |
| The assessment team checked the water quality test report and found the water for testing was sampled on 10/01/2012, which is during the drought period. Thus, the response from PP is reasonable and acceptable. Thus, CL#8 is closed out.                                                                                                                                        |            |            |                           |            |                  |
| Acceptance and Close out by Lead Assessor: Yi Liao                                                                                                                                                                                                                                                                                                                                 |            |            |                           |            | Date: 08/01/2013 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |            |                           |                          |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|--------------------------|------------------------|
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 15/03/2012 | Raised by: | Liao YI, Tracy ZHENG Ying |                          |                        |
| Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CL         | Number:    | #9                        | Reference:               | Section 2 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |            |                           | <b>Date:</b> 16/03/2012  |                        |
| According to the "Guidelines on completeness check of request for issuance (Annex 68, EB48) para. 10 a (viii), monitoring report shall contains comparison of the actual emission reduction achieved in the monitoring period with the estimated value in the registered PDD for the same period and the reasons for significant increasing or decreasing. Please make relevant revision in this regard if necessary.                                                                             |            |            |                           |                          |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |            |                           | <b>Date :</b> 31/03/2012 |                        |
| <i>The comparison has been added up at the end of the updated MR.</i>                                                                                                                                                                                                                                                                                                                                                                                                                             |            |            |                           |                          |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |            |                           |                          |                        |
| <i>Updated MR has been provided</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |            |                           |                          |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |            |                           |                          |                        |
| The monitoring report version 2 dated 31/03/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |                          |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |                          |                        |
| The assessment team checked the monitoring report version 2 and found that the comparison of the actual emission reduction achieved in the monitoring period with the estimated value in the registered PDD for the same period have been added in end of the MR version 2. However, the reason for explaining the significant decreasing is not sufficient enough with only qualitative description presented. More convincing and quantitative explanation is needed. Thus, CL#9 is still open. |            |            |                           |                          |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |            |                           | <b>Date:</b> 25/05/2012  |                        |
| <i>More convincing and quantitative explanation is provided in updated "25/05/2012_Monitoring report version 3 of the 3<sup>rd</sup> monitoring period"</i>                                                                                                                                                                                                                                                                                                                                       |            |            |                           |                          |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |            |                           |                          |                        |
| <i>25/05/2012_Monitoring report version 3 of the 3<sup>rd</sup> monitoring period, dated 25/05/2012</i>                                                                                                                                                                                                                                                                                                                                                                                           |            |            |                           |                          |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |            |                           |                          |                        |
| MR version 3 dated 25/05/2012                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |            |                           |                          |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |                           |                          |                        |
| The assessment team verified the revision of the MR indicated was consistent the verified onsite, the explaining was consistent with the actual activity, it can be deemed as reasonable and acceptable. CL #9 is closed out.                                                                                                                                                                                                                                                                     |            |            |                           |                          |                        |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |            |                           | <b>Date:</b> 08/01/2013  |                        |

|                                                                                                                                                                                                                              |            |            |                           |                          |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|--------------------------|------------------------|
| Date:                                                                                                                                                                                                                        | 01/02/2013 | Raised by: | Liao YI, Tracy ZHENG Ying |                          |                        |
| Type:                                                                                                                                                                                                                        | CL         | Number:    | #10                       | Reference:               | Section 5 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                |            |            |                           | <b>Date:</b> 01/02/2013  |                        |
| <b>ER:</b>                                                                                                                                                                                                                   |            |            |                           |                          |                        |
| 1. The methane fraction of Phase 1 from 03/08/2010 to 31/08/2010 (48.49%), from 03/08/2011 to 28/02/2011(55.48%) and from 06/07/2011 to 31/07/2011 (55.84%) in the sheet were not consistent with the 95% lower bound value. |            |            |                           |                          |                        |
| 2. The value of LFG(m3) at 1:00 on 09/09/2010 is 6328m3 which is much higher than the rest of the hours.                                                                                                                     |            |            |                           |                          |                        |
| 3. Please clarify why the value of LFG(m3) is kept while the corresponding ER of Methane was zero from 11/09/2010 to 17/09/2010, and 09/09/2011 for phase I.                                                                 |            |            |                           |                          |                        |
| 4. Please check the meter reading of M1 at 24:00 on 01/12/2011.                                                                                                                                                              |            |            |                           |                          |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                         |            |            |                           | <b>Date :</b> 07/02/2013 |                        |

**ER:**

1. The methane fraction of Phase 1 from 03/08/2010 to 31/08/2010 has been corrected to 48.26%,  
The methane fraction of Phase 1 from 03/02/2011 to 28/02/2011 has been corrected to 55.64% and The methane fraction of Phase 2 from 06/07/2011 to 31/07/2011 has been corrected to 56.01%.
2. The value of LFG(m3) at 1:00 on 09/09/2010 is 628 m3 actually and has been corrected.
3. The value of LFG (m3) from 11/09/2010 to 17/09/2010, and 09/09/2011 for phase I is considered to Zero as well in order to be conservative.
4. The value of M1 at 24:00 on 01/12/2011 has been corrected to 20583.45

**Documentation Provided as Evidence by Project Participant:**

*ER\_1\_Monitoring\_Data\_Suzhou\_LFG(2010\_08) with lower bound;*  
*ER\_1\_Monitoring\_Data\_Suzhou\_LFG(2011\_02) with lower bound;*  
*ER\_1\_Monitoring\_Data\_Suzhou\_LFG(2011\_07) with lower bound;*  
*ER\_2\_Logbook on 09/09/2010;*  
*ER\_2\_Monitoring\_Data\_Suzhou\_LFG(2010\_09) with lower bound;*  
*ER\_3\_Monitoring\_Data\_Suzhou\_LFG(2010\_09) with lower bound;*  
*ER\_3\_Monitoring\_Data\_Suzhou\_LFG(2011\_09) with lower bound;*  
*ER\_4\_Logbook on 01/12/2011.*  
 MR, ER version 4, dated 07/02/2013

**Information Verified by Lead Assessor:**

1. The revised ER calculation on 2010-August, 2011-February, 2011-July
2. the raw logbook on 09/09/2010, the revised ER calculation on 2010-September
3. the revised ER calculation on 2010-September, 2011-September
4. the raw logbook on 01/12/2011
5. MR, ER version 4, dated 07/02/2013

**Reasoning for not Acceptance or Acceptance and Close Out:**

The assessment team has verified the revised ER calculation and the raw logbook accordingly, it is confirmed the revised ER report values are correct. CL #10 is closed out. Details as below

**ER:**

5. The methane fraction of Phase 1 from 03/08/2010 to 31/08/2010 has been corrected to 48.25%,  
The methane fraction of Phase 1 from 03/02/2011 to 28/02/2011 has been corrected to 55.48% and The methane fraction of Phase 2 from 06/07/2011 to 31/07/2011 has been corrected to 55.72%.
6. The value of LFG(m3) at 1:00 on 09/09/2012 is 628 m3 actually and has been corrected.
7. The value of LFG (m3) from 11/09/2010 to 17/09/2010, and 09/09/2011 for phase I is considered to Zero as well in order to be conservative.
8. The value of M1 at 24:00 on 01/12/2011 has been corrected to 20583.45

**Acceptance and Close out by Lead Assessor: Yi Liao**      **Date: 25/02/2013**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            |            |                           |                          |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------|--------------------------|------------------------|
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 01/02/2013 | Raised by: | Liao YI, Tracy ZHENG Ying |                          |                        |
| Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CAR        | Number:    | #11                       | Reference:               | Section 1 of Checklist |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |            |                           | <b>Date:</b> 01/02/2013  |                        |
| <b>MR:</b><br>Please PP is required to check/correct the following information: <ol style="list-style-type: none"> <li>1. The monitoring period is reported as from 01/08/2009 to 31/07/2009 in page 14.</li> <li>2. The serial number of the methane analyzer for WCH4 is GM08018 in page 20 of the MR but GM0801810S in page 7.</li> <li>3. The period of 2011 is not reported in lower and higher bound of W table in page 24 of the MR.</li> <li>4. The value of EL<sub>LFG</sub> for 01/01/2011 - 31/07/2011 is not correctly calculated in page 25 of the MR;</li> <li>5. The value of EL<sub>LFG</sub> for this monitoring period is not correct in page 32 of the MR;</li> </ol> |            |            |                           |                          |                        |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |            |                           | <b>Date :</b> 07/02/2013 |                        |
| <b>MR:</b> <ol style="list-style-type: none"> <li>1. The monitoring period has been revised 01/08/2010 to 31/12/2011 in page 14.</li> <li>2. The serial number of the methane analyzer for WCH4 has been revised to GM08018 in page 7.</li> <li>3. It is typing mistake. The lower and higher bound of W has been reported for the period from 01/01/2011 to 31/12/2011 in page 24.</li> <li>4. The value of EL<sub>LFG</sub> for 01/01/2011 - 31/07/2011 has been corrected to 13,237 in page 25 of the MR;</li> <li>5. The value of EL<sub>LFG</sub> for this monitoring period has been corrected to 32,402 in page 32 of the MR;</li> </ol>                                          |            |            |                           |                          |                        |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |            |                           |                          |                        |
| <i>MR_2_W_Photo for_Methane Analyzer;</i><br><i>MR_2_W_Report for_Methane Analyzer calibration certification;</i><br><i>MR_3_95% confidence of W_commented;</i><br><i>07/02/2013_Monitoring report version 4 of the 3rd monitoring period; date 07/02/2013,</i><br><i>07/02/2012_Emission Reduction of Suzhou_LFG., version 4, date 07/02/2013</i>                                                                                                                                                                                                                                                                                                                                       |            |            |                           |                          |                        |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |            |                           |                          |                        |
| The revised MR version 4, date 07/02/2013,<br>Calculation certification for methane analyzer for WCH4<br>Revised <i>MR_3_95% confidence of W_commented;</i><br>Revised ER calculation version 4, dated 07/02/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |            |                           |                          |                        |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |            |                           |                          |                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <p>The assessment team has verified the revised MR version 4, dated 07/02/2013 and ER dated 07/02/2013, the inconsistent have revised accordingly, but the ER calculation need to further revision. Please check the total ER input value according to raw <i>Monitoring_Data_Suzhou_LFG(month) with lower bound</i>. Details as</p>                                                                                                                                                                                                                                   |                          |
| <p>6. The monitoring period has been revised 01/08/2010 to 31/12/2011 in page 14.<br/>LA: OK</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |
| <p>7. The serial number of the methane analyzer for WCH4 has been revised to GM08018 in page 7.<br/>LA: Pending on, further make correction on page 10</p>                                                                                                                                                                                                                                                                                                                                                                                                             |                          |
| <p>8. It is typing mistake. The lower and higher bound of W has been reported for the period from 01/01/2011 to 31/12/2011 in page 24.<br/>LA: OK</p>                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |
| <p>9. The value of EL<sub>LFG</sub> for 01/01/2011 - 31/07/2011 has been corrected to 13,237 in page 25 of the MR;<br/>LA: OK</p>                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |
| <p>10. The value of EL<sub>LFG</sub> for this monitoring period has been corrected to 32,402 in page 32 of the MR;<br/>LA: Pending on, the total ER on 2010-september, the ER calculation on 2010-November, 2010-December, 2011-Nov input values are inconsistent with the raw daily ER data.</p>                                                                                                                                                                                                                                                                      |                          |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Date : 07/02/2013</b> |
| <p><b>MR:</b><br/>PP has revised the total ER to 9,061 and ER by Methane to 7,141 on 2010-Sep in the revised ER calculation dated 27/02/2013.<br/>PP has revised the total ER to 9,900 on 2010-Nov in the revised ER calculation dated 27/02/2013.<br/>PP has revised the total ER to 9,307 on 2010-Dec in the revised ER calculation dated 27/02/2013.<br/>PP has revised the total ER to 7,532 on 2011-Mar in the revised ER calculation dated 27/02/2013.<br/>PP has revised the total ER to 12,687 on 2011-Nov in the revised ER calculation dated 27/02/2013.</p> |                          |
| <b>Documentation Provided as Evidence by Project Participant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |
| 27022013_Monitoring report version 5 of the 3rd monitoring period.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| <b>Information Verified by Lead Assessor:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |
| MR version 5, dated 27/02/2013<br>ER version 5, dated 27/02/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |
| <b>Reasoning for not Acceptance or Acceptance and Close Out:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |
| <p>The assessment team has verified the revised MR version 5, dated 27/02/2013 and ER dated 27/02/2013, the inconsistent have revised accordingly, Details as</p> <p>2. The serial number of the methane analyzer for WCH4 has been revised to GM08018 in page 7.<br/>LA: the MR version 5 has corrected, OK</p> <p>5. The value of EL<sub>LFG</sub> for this monitoring period has been corrected to 32,402 in page 32 of the MR;<br/>LA: the ER and MR has revised correct.<br/>CAR #11 is closed out.</p>                                                           |                          |
| <b>Acceptance and Close out by Lead Assessor: Yi Liao</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Date: 04/03/2013</b>  |

## 10. Statement of Competence

### Statement of Competence

Name: Yi Liao

#### Status

|                  |       |                      |   |
|------------------|-------|----------------------|---|
| - Lead Assessor  | x     | - Expert             | x |
| - Assessor       | x     | - Financial Expert   |   |
| - Local Assessor | China | - Technical Reviewer |   |

#### Scopes of Expertise

##### 1. Energy Industries (renewable / non-renewable)

x

Technical Area(s): TA 1.1 Thermal energy generation from fossil fuels and biomass including thermal electricity from solar  
TA 1.2 Energy generation from renewable energy sources

##### 2. Energy Distribution

Technical Area(s):

##### 3. Energy Demand

Technical Area(s):

##### 4. Manufacturing

Technical Area(s):

##### 5. Chemical Industry

Technical Area(s):

##### 6. Construction

Technical Area(s):

##### 7. Transport

Technical Area(s):

##### 8. Mining/Mineral Production

Technical Area(s):

##### 9. Metal Production

Technical Area(s):

##### 10. Fugitive Emissions from Fuels (solid, oil and gas)

Technical Area(s):

##### 11. Fugitive Emissions from Production and

Consumption of Halocarbons and Sulphur Hexafluoride

Technical Area(s):

##### 12. Solvent Use

Technical Area(s):

##### 13. Waste Handling and Disposal

Technical Area(s): TA 13.1: Waste handling and disposal

##### 14. Afforestation and Reforestation

Technical Area(s):

##### 15. Agriculture

Technical Area(s):

Approved Member of Staff by: Siddharth Yadav Date: 15/02/2012

## Statement of Competence

Name: Tracy  
Zheng

### Status

|                  |       |                      |   |
|------------------|-------|----------------------|---|
| - Lead Assessor  | X     | - Expert             | x |
| - Assessor       | x     | - Financial Expert   |   |
| - Local Assessor | China | - Technical Reviewer |   |

### Scopes of Expertise

#### 1. Energy Industries (renewable / non-renewable)

x

Technical Area(s): TA 1.2 Energy generation from renewable energy sources

#### 2. Energy Distribution

Technical Area(s):

#### 3. Energy Demand

Technical Area(s):

#### 4. Manufacturing

Technical Area(s):

#### 5. Chemical Industry

Technical Area(s):

#### 6. Construction

Technical Area(s):

#### 7. Transport

Technical Area(s):

#### 8. Mining/Mineral Production

Technical Area(s):

#### 9. Metal Production

Technical Area(s):

#### 10. Fugitive Emissions from Fuels (solid, oil and gas)

Technical Area(s):

#### 11. Fugitive Emissions from Production and

Consumption of Halocarbons and Sulphur Hexafluoride

Technical Area(s):

#### 12. Solvent Use

Technical Area(s):

#### 13. Waste Handling and Disposal

Technical Area(s):

#### 14. Afforestation and Reforestation

Technical Area(s):

#### 15. Agriculture

Technical Area(s):

Approved Member of Staff by:

Siddharth  
Yadav

Date:

25/04/2012

## Statement of Competence

Name: Michael  
Wu

### Status

|                  |       |                      |   |
|------------------|-------|----------------------|---|
| - Lead Assessor  | x     | - Expert             | x |
| - Assessor       | x     | - Financial Expert   |   |
| - Local Assessor | China | - Technical Reviewer | x |

### Scopes of Expertise

|                                                                                                       |          |
|-------------------------------------------------------------------------------------------------------|----------|
| <b>1. Energy Industries (renewable / non-renewable)</b>                                               | <b>x</b> |
| Technical Area(s): TA 1.2 Energy generation from renewable energy sources                             |          |
| <b>2. Energy Distribution</b>                                                                         |          |
| Technical Area(s):                                                                                    |          |
| <b>3. Energy Demand</b>                                                                               |          |
| Technical Area(s):                                                                                    |          |
| <b>4. Manufacturing</b>                                                                               |          |
| Technical Area(s):                                                                                    |          |
| <b>5. Chemical Industry</b>                                                                           |          |
| Technical Area(s):                                                                                    |          |
| <b>6. Construction</b>                                                                                |          |
| Technical Area(s):                                                                                    |          |
| <b>7. Transport</b>                                                                                   |          |
| Technical Area(s):                                                                                    |          |
| <b>8. Mining/Mineral Production</b>                                                                   |          |
| Technical Area(s):                                                                                    |          |
| <b>9. Metal Production</b>                                                                            |          |
| Technical Area(s):                                                                                    |          |
| <b>10. Fugitive Emissions from Fuels (solid, oil and gas)</b>                                         |          |
| Technical Area(s):                                                                                    |          |
| <b>11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride</b> |          |
| Technical Area(s):                                                                                    |          |
| <b>12. Solvent Use</b>                                                                                |          |
| Technical Area(s):                                                                                    |          |
| <b>13. Waste Handling and Disposal</b>                                                                |          |
| Technical Area(s):                                                                                    |          |
| <b>14. Afforestation and Reforestation</b>                                                            |          |
| Technical Area(s):                                                                                    |          |
| <b>15. Agriculture</b>                                                                                |          |
| Technical Area(s):                                                                                    |          |

Approved Member of Staff by: Siddharth Yadav Date: 19/10/2012

## Statement of Competence

Name: **Jumson Fu**

### Status

|                  |                          |                      |                                     |
|------------------|--------------------------|----------------------|-------------------------------------|
| - Lead Assessor  | <input type="checkbox"/> | - Expert             | <input checked="" type="checkbox"/> |
| - Assessor       | <input type="checkbox"/> | - Financial Expert   | <input type="checkbox"/>            |
| - Local Assessor | <input type="checkbox"/> | - Technical Reviewer | <input type="checkbox"/>            |

### Scopes of Expertise

|                                                                                                                            |                                     |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>1. Energy Industries (renewable / non-renewable)</b>                                                                    | <input checked="" type="checkbox"/> |
| Technical Area(s): TA 1.1 Thermal energy generation from fossil fuels and biomass including thermal electricity from solar |                                     |
| <b>2. Energy Distribution</b>                                                                                              | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>3. Energy Demand</b>                                                                                                    | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>4. Manufacturing</b>                                                                                                    | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>5. Chemical Industry</b>                                                                                                | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>6. Construction</b>                                                                                                     | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>7. Transport</b>                                                                                                        | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>8. Mining/Mineral Production</b>                                                                                        | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>9. Metal Production</b>                                                                                                 | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>10. Fugitive Emissions from Fuels (solid, oil and gas)</b>                                                              | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride</b>                      | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>12. Solvent Use</b>                                                                                                     | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>13. Waste Handling and Disposal</b>                                                                                     | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>14. Afforestation and Reforestation</b>                                                                                 | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |
| <b>15. Agriculture</b>                                                                                                     | <input type="checkbox"/>            |
| Technical Area(s):                                                                                                         |                                     |

Approved Member of Staff by: **Siddharth Yadav** Date: **15/02/2012**

## Statement of Competence

Name: Shute  
Li

### Status

|                  |       |                      |   |
|------------------|-------|----------------------|---|
| - Lead Assessor  | x     | - Expert             | x |
| - Assessor       | x     | - Financial Expert   |   |
| - Local Assessor | China | - Technical Reviewer | x |

### Scopes of Expertise

|                                                                                                       |          |
|-------------------------------------------------------------------------------------------------------|----------|
| <b>1. Energy Industries (renewable / non-renewable)</b>                                               | <b>x</b> |
| Technical Area(s): TA 1.2 Energy generation from renewable energy sources                             |          |
| <b>2. Energy Distribution</b>                                                                         |          |
| Technical Area(s):                                                                                    |          |
| <b>3. Energy Demand</b>                                                                               |          |
| Technical Area(s):                                                                                    |          |
| <b>4. Manufacturing</b>                                                                               |          |
| Technical Area(s):                                                                                    |          |
| <b>5. Chemical Industry</b>                                                                           |          |
| Technical Area(s):                                                                                    |          |
| <b>6. Construction</b>                                                                                |          |
| Technical Area(s):                                                                                    |          |
| <b>7. Transport</b>                                                                                   |          |
| Technical Area(s):                                                                                    |          |
| <b>8. Mining/Mineral Production</b>                                                                   |          |
| Technical Area(s):                                                                                    |          |
| <b>9. Metal Production</b>                                                                            |          |
| Technical Area(s):                                                                                    |          |
| <b>10. Fugitive Emissions from Fuels (solid, oil and gas)</b>                                         |          |
| Technical Area(s):                                                                                    |          |
| <b>11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride</b> | <b>x</b> |
| Technical Area(s): TA 11.2 GHG capture and destruction                                                |          |
| <b>12. Solvent Use</b>                                                                                |          |
| Technical Area(s):                                                                                    |          |
| <b>13. Waste Handling and Disposal</b>                                                                | <b>x</b> |
| Technical Area(s): TA 13.1: Waste handling and disposal                                               |          |
| <b>14. Afforestation and Reforestation</b>                                                            |          |
| Technical Area(s):                                                                                    |          |
| <b>15. Agriculture</b>                                                                                |          |
| Technical Area(s):                                                                                    |          |

Approved Member of Staff by: Siddharth Yadav Date: 01/08/2012

## 11. Photographic Evidence

|                                                                                   |                                          |
|-----------------------------------------------------------------------------------|------------------------------------------|
| Unique reference number: 01965563                                                 | Parameter: LFG <sub>electricity</sub> ,y |
| Name of equipment: flow meter F1                                                  | Date: 29/02/2012                         |
|  |                                          |

|                                                                                     |                                          |
|-------------------------------------------------------------------------------------|------------------------------------------|
| Unique reference number: FD21246A                                                   | Parameter: LFG <sub>electricity</sub> ,y |
| Name of equipment: flow meter F2                                                    | Date: 29/02/2012                         |
|  |                                          |

|                                                                                      |                  |
|--------------------------------------------------------------------------------------|------------------|
| Unique reference number: 05-03                                                       | Parameter: T     |
| Name of equipment: T1                                                                | Date: 29/02/2012 |
|  |                  |

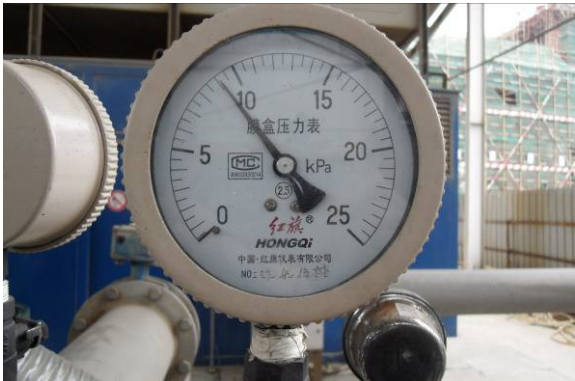
|                                                                                   |                  |
|-----------------------------------------------------------------------------------|------------------|
| Unique reference number: 1107301                                                  | Parameter: T     |
| Name of equipment: T2                                                             | Date: 29/02/2012 |
|  |                  |

|                                                                                     |                  |
|-------------------------------------------------------------------------------------|------------------|
| Unique reference number: 05-04                                                      | Parameter: T     |
| Name of equipment: T3                                                               | Date: 29/02/2012 |
|  |                  |

|                                                                                   |                  |
|-----------------------------------------------------------------------------------|------------------|
| Unique reference number: 1107307                                                  | Parameter: T     |
| Name of equipment: T4                                                             | Date: 29/02/2012 |
|  |                  |

|                                                                                     |                  |
|-------------------------------------------------------------------------------------|------------------|
| Unique reference number: 09.4.13.163                                                | Parameter: P     |
| Name of equipment: P1                                                               | Date: 29/02/2012 |
|  |                  |

|                                                                                     |                  |
|-------------------------------------------------------------------------------------|------------------|
| Unique reference number: 10.3.2.254                                                 | Parameter: P     |
| Name of equipment: P2                                                               | Date: 29/02/2012 |
|  |                  |

|                                                                                   |                  |
|-----------------------------------------------------------------------------------|------------------|
| Unique reference number: 09.4.13.158                                              | Parameter: P     |
| Name of equipment: P3                                                             | Date: 29/02/2012 |
|  |                  |

|                                                                                    |                  |
|------------------------------------------------------------------------------------|------------------|
| Unique reference number: 10.3.2.267                                                | Parameter: P     |
| Name of equipment: P4                                                              | Date: 29/02/2012 |
|  |                  |

|                                                                                     |                                     |
|-------------------------------------------------------------------------------------|-------------------------------------|
| Unique reference number: 100791967                                                  | Parameter: EL <sub>generation</sub> |
| Name of equipment: electricity meter M1                                             | Date: 29/02/2012                    |
|  |                                     |

|                                                                                   |                                     |
|-----------------------------------------------------------------------------------|-------------------------------------|
| Unique reference number: 100791936                                                | Parameter: EL <sub>generation</sub> |
| Name of equipment: electricity meter M2                                           | Date: 29/02/2012                    |
|  |                                     |

|                                                                                    |                                     |
|------------------------------------------------------------------------------------|-------------------------------------|
| Unique reference number: 101997920                                                 | Parameter: EL <sub>generation</sub> |
| Name of equipment: electricity meter M3                                            | Date: 29/02/2012                    |
|  |                                     |

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| Unique reference number: 2355946                                                    | Parameter: EL <sub>internal consumption</sub> |
| Name of equipment: electricity meter M5                                             | Date: 29/02/2012                              |
|  |                                               |

|                                                                                   |                                               |
|-----------------------------------------------------------------------------------|-----------------------------------------------|
| Unique reference number: 2008-0577129                                             | Parameter: EL <sub>internal consumption</sub> |
| Name of equipment: electricity meter M6                                           | Date: 29/02/2012                              |
|  |                                               |

## History

| Version | Nature of revision | Validity                       |
|---------|--------------------|--------------------------------|
| 1.1     | Initial adoption   | Active from the 04 August 2011 |