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Your ref.:  
CDM Ref 0887

Our ref.:  
MLEH/TANGZA

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## Validation opinion

### Request for revision of monitoring plan for project activity 0887 “Shenzhen Xiaping Landfill Gas Collection and Utilization Project” in China

We refer to the procedure for revising monitoring plans adopted at EB 26. We herewith request a revision of the monitoring plan for project activity 0887 entitled “Project 0887: Shenzhen Xiaping Landfill Gas Collection and Utilization Project”.

The project applies the approved consolidated baseline methodology ACM0001 (version 04 of 28 July 2006) – “*Consolidated baseline methodology for landfill gas project activities*”.

The revision of the monitoring plan is related to replacing the LFG main pipe with two parallel ones to widen the measurement range of the LFG flow rate. The reasons for the revisions to the monitoring plan are described below.

According to the monitoring plan in the approved project design document (version 7), the main flow rate is measured by one flow meter. Considering that the ultimate hourly flow rate might be high, a 300 mm-diameter main pipe with a flow meter ranging from 1270 m<sup>3</sup>/h to 10180m<sup>3</sup>/h has been installed. As per the investigation by project owner, the minimum flow rate of a 300 mm-diameter vortex flow meter always stays around 1000 m<sup>3</sup>/h (higher than the flow rate needs for operating of a generator at full capacity, i.e. 650m<sup>3</sup>/h). For instance, the minimum flow rate of a 300 mm-diameter *ROSEMENT* vortex flow meter is about 2597 m<sup>3</sup>/h, that of a YOKOGAWA produced vortex flow meter remains at about 1260 m<sup>3</sup>/h and that of an *E+H* vortex flow meter is about 2358 m<sup>3</sup>/h. After operating for a period of time, the project owner finds that the actual flow rate may be lower than 1270m<sup>3</sup>/h at the following two situations:

1. Raining season which results in high water level in waste mass affects the landfill gas collection and
2. The damage and maintenance of the generators and the flares also result in less consumption of the landfill gas.

Consequently, this flow meter can not measure the actual minimum flow rate or a great error occurs to measurement. In order to guarantee that the error remains within the allowable limits, the project owner always shuts down the system when the actual flow rate is lower than the minimum of the flow meter and the effective operation time of this project thus reduces.

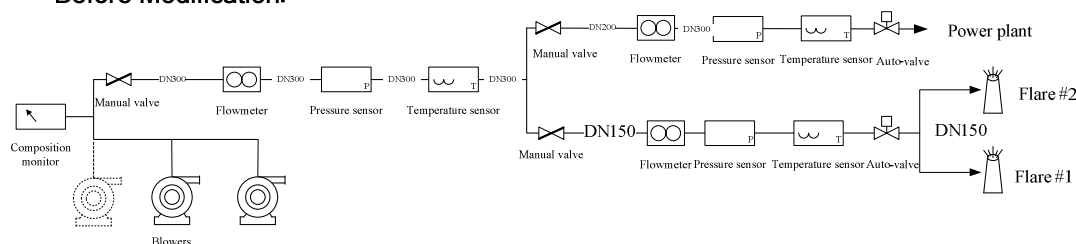
Therefore, the project owner intends to revise the monitoring plan as follows:

The main pipe is replaced by two 200 mm-diameter paralleling ones and two flow meters with a range of 530-8712 m<sup>3</sup>/h will be installed on each pipe for measurement (refer to the illustration below). In this condition, one flow meter will be used when the actual rate is lower than 8500 m<sup>3</sup>/h and both of the two will be used when the rate is higher than 8500 m<sup>3</sup>/h. A precise and wide measurement range will be available for this project. It should be noted that though the monitoring method has changed, the equipment calibration principles and QA/QC procedures will still comply with that set out in PDD (v7).

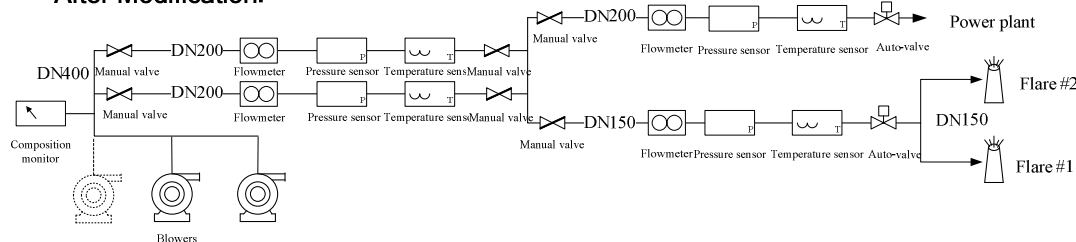
Shenzhen Xiaping Landfill Gas Collection and Utilization Project

### Pipe Modification Illustration

#### Before Modification:



#### After Modification:



(a) the proposed revision of the monitoring plan ensures that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revisions. The proposed revision of the monitoring plan widens the measurement range of the LFG flow rate in the previous main pipe and improves the measurement accuracy, especially when the flow rate is lower. The level of completeness in the monitoring and verification process will not be reduced as a result of the revisions as well.

(b) the proposed revision of the monitoring plan is in accordance with the approved monitoring methodology applicable to the project activity.

The total flow rates of two paralleling pipes will be used to replace the flow rate of previous main pipe. The proposed revision of the monitoring plan will remain in accordance with the approved monitoring methodology applicable to the project activity in principle.

(c) the findings of previous verification reports, if any, have been taken into account. There are no findings from previous verifications so far.

Yours faithfully

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